Florida Department of Agriculture and Consumer Services

Office of Agricultural Water Policy

Status of Implementation of Agricultural Nonpoint Source Best Management Practices

July 1, 2022

Report to the Governor, the President of the Senate, and the Speaker of the House
Pursuant to Section 403.0675(2), F.S.

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Contents

Executive Summary 3
Acronyms 4
List of Tables 4
Introduction 5
Status of BMP Implementation Discussion 6
- Program Enrollment 6
- Implementation Verification Site Visits 10
- Implementation Assistance 12
- BMP Cost-Share 13
- BMP Program Improvements 16

Next Steps 17
Acknowledgements 18
Appendix I: Summary of BMP Implementation Statewide and by Basin Management Action Plan 19
Appendix II: Data 54
- FSAID 54
- BMP Program Enrollment Data 55
- Limitations of Enrollment Data 55
- Data Management 55

Appendix III: Land Use Characterization 57
Appendix IV: Research 63

Executive Summary

During 2021, the Florida Department of Agriculture and Consumer Services Office of Agricultural Water Policy (OAWP) continued its efforts to successfully implement the requirements of the Clean Waterways Act (Senate Bill 712, 2020), performing site visits to verify the proper implementation of applicable agricultural best management practices (BMP) for producers enrolled in the BMP Program as of July 1, 2020. In most cases, OAWP exceeded performance expectations in undertaking the statutory requirements, despite higher-than-expected human resource vacancies and the continuing impacts of COVID-19. In 2021, OAWP prioritized implementation verification (IV) site visits over enrolling new agricultural operations in response to staffing shortages. It is anticipated that it will be necessary to secure additional full-time staff positions to achieve BMP Program enrollment goals and conduct implementation verification visits as required by law.

The OAWP successfully provided cost-share assistance to many enrolled agricultural producers facilitating implementation of BMPs despite challenges resulting from the COVID-19 pandemic. Nutrient application data will continue to be collected as required by the Clean Waterways Act, and this data will be used to evaluate nutrient and irrigation use efficiencies resulting from implementation of BMPs. The OAWP continues to design and build essential data collection and management systems, field staff tools, and training materials to meet data quality, storage, analysis, and reporting requirements.

This report includes information on the status of BMP implementation for calendar year 2021 as well as the first 18 months (7/1/2020 - 12/31/2021) of the 24-month period required to complete IV site visits and nutrient record collection pursuant to the Clean Waterways Act. The next report will summarize data from the entire 24-month period.

A Story Map of this report can be found at Agricultural Water Policy / Divisions & Offices / Home - Florida Department of Agriculture & Consumer Services (fdacs.gov), and enables readers to view data and maps in an interactive environment.

Acronyms

ALG	Agricultural Lands Geodatabase
BMAP	Basin Management Action Plan
BMP	Best Management Practice
DOR	Department of Revenue
F.A.C.	Florida Administrative Code
FCO	Fixed Capital Outlay
FDACS	Florida Department of Agriculture and Consumer Services
FDEP	Florida Department of Environmental Protection
F.S.	Florida Statutes
FSAID	Florida Statewide Agricultural Irrigation Demand
FWRA	Florida Watershed Restoration Act
GIS	Geographic Information System
IV	Implementation Verification
NOI	Notice of Intent (to implement BMPs)
OAWP	Office of Agricultural Water Policy
RCWG	Research Coordinating Work Group
SFWMD	South Florida Water Management District
TMDL	Total Maximum Daily Load

List of Tables

Table 1. Status of Statewide BMP Implementation for Producers Enrolled in the BMP Program 7
Table 2. Status of BMP Enrollment Within BMAP Areas 8
Table 3. Analysis and Characterization of Unenrolled Lands Within BMAP Areas 9
Table 4. Status of IVs in BMAPs since July 1, 2020 (no adjustment for IVs referred to DEP) 11
Table 5. Cost-share for Projects Completed in 2021 by BMAP 14
Table 6. Cost-share for All Projects Completed Statewide in 2021 by BMP Category 15
Table 7. FDACS Categories and DEP Bins 62

Introduction

The Florida Department of Agriculture and Consumer Services (FDACS) Office of Agricultural Water Policy (OAWP) collaborates with Florida's agricultural landowners and producers to implement best management practices (BMPs) for nutrient reduction, irrigation management, and the protection of water resources. Agricultural BMPs are an integral part of water resource protection required under the regulatory BMP Program implemented by FDACS OAWP. This report presents information required annually pursuant to Section 403.0675(2), Florida Statutes on the status of implementation of the FDACS BMP Program.

Under the Florida Watershed Restoration Act (FWRA), the Florida Department of Environmental Protection (FDEP) is directed to develop water quality restoration goals for impaired waterbodies. These water quality restoration goals, known as total maximum daily loads (TMDLs), are the maximum amount of a pollutant that a waterbody can assimilate and remain suitable for its designated use. [1] Once a TMDL is adopted, FDEP may develop a basin management action plan (BMAP) that identifies enforceable strategies for restoring the impaired waterbody. The agricultural industry is one of many stakeholders identified in most BMAPs. Florida law requires agricultural landowners located within BMAPs to either enroll in the FDACS BMP Program and properly implement the BMPs applicable to their property and operation or conduct water quality monitoring activities. [2] Proper implementation of FDACS agricultural BMPs is the industry's strategy to address agricultural nonpoint pollution sources. Enrollment in the BMP Program and the proper implementation of applicable BMPs provides a presumption of compliance with state water quality standards that is not provided otherwise.

For the purposes of the FDACS BMP Program, OAWP defines a BMP as a means, a practice or combination of practices determined by the coordinating agencies, based on research, field-testing, and expert review, to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality in agricultural and urban discharges. BMPs must reflect a balance between water quality improvements and agricultural productivity. [3] The FWRA authorizes and directs FDACS to develop and adopt through rulemaking BMPs that will enable the agricultural industry to achieve the reductions allocated in BMAPs for agricultural pollutant sources. [4]

Newly proposed BMPs are initially verified as effective by FDEP [5] based on underlying research and best professional judgement and are then adopted by reference in the applicable agricultural commodity manual under Title 5M, Florida Administrative Code (F.A.C). FDACS has adopted ten (10) separate BMP manuals that cover nearly all major agricultural commodities in Florida. [6]

1. Section 403.067, F.S.; BMAP information is available at https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps.
2. Section 403.067, F.S.
3. Section 373.4595(2)(a), F.S.
4. Section 403.067(7)(c), F.S.
5. Ibid.
6. One manual addresses wildlife (imperiled state species). The BMP manuals are available at https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices.

Producers or agricultural landowners within a BMAP who are enrolled in the FDACS BMP Program and are properly implementing the applicable BMPs identified on the Checklist are entitled to a presumption of compliance with state water quality standards. FDACS is required to perform BMP Implementation Verification (IV) site visits to enrolled operations every two years to ensure that BMPs are being properly implemented. [7] Producers and agricultural landowners outside BMAP areas are strongly encouraged to enroll in the BMP Program for the benefits that enrollment provides. Enrolled producers are also eligible to receive cost-share funds from FDACS to implement certain BMPs based on an evaluation of the operation and the availability of funding, and can use the free services provided by the FDACS Mobile Irrigation Laboratories to evaluate irrigation system efficiency.

Status of BMP Implementation Discussion

Program Enrollment

To initially enroll in the FDACS BMP Program, agricultural landowners and producers must meet with an FDACS representative on site to determine the appropriate practices that are applicable to their operation(s). Producers collaborate with the FDACS representative to complete a Notice of Intent to implement the BMPs (NOI) and the BMP Checklist from the applicable BMP manual. Once the NOI and Checklist are completed, signed, and submitted to OAWP, the producer is formally enrolled in the BMP Program. Enrolled agricultural landowners and producers who are properly implementing the applicable BMPs [8] are entitled to a presumption of compliance with state water quality standards.

If multiple efforts to contact agricultural landowners within BMAPs about enrollment in the BMP Program are unsuccessful or if the landowner chooses not to enroll in the BMP Program or to properly implement the applicable BMPs, FDACS refers the landowner to FDEP to either implement water quality monitoring under the requirements of Chapter 62-307, F.A.C., or to be subject to other enforcement action as necessary. Water quality monitoring must demonstrate compliance with water quality criteria for the parameters addressed by the BMAP. [9]

The process of enrolling agricultural landowners and producers in the BMP Program is staff-intensive, requiring site visits to determine the water resource concerns on site and in the surrounding area. The site visit also includes an evaluation of production methods and activities, documentation of parcel information, site mapping, and data entry. The time needed to complete a single enrollment depends on the size and intensity of the agricultural operation; the requirements of any applicable BMP(s); the producer's technical and financial resources; and the assistance or training needed by the producer to properly implement the applicable BMPs identified for the parcel. Site-specific factors are considered when determining the applicability of BMPs including commodity type, topography, geology, location of production, soil type, parcel size, and type and sensitivity of the ecological resources in the surrounding areas.

7. 403.067, F.S.
8. Chapter 5M-1, F.A.C. https://www.flrules.org/gateway/ChapterHome.asp?Chapter=5M-1
9. Chapter 62-307.200, F.A.C.

The agricultural areas and acreages identified in this report are based on the Florida Statewide Agricultural Irrigation Demand (Version Eight) (FSAID8) Agricultural Lands Geodatabase (ALG) datasets [10]. Data represent the status of BMP Program enrollment and IV site visits at the end of calendar year 2021. As of December 31, 2021, 61 percent (61%) of the agricultural acres identified in FSAID8 were enrolled in the BMP Program **(Table 1)**.

Table 1. Status of Statewide BMP Implementation for Producers Enrolled in the BMP Program

Statewide Metrics	Value
Agricultural acres	7,596,641
Agricultural acres enrolled in the BMP Program	4,628,627
Irrigated agricultural acres	1,862,717
Irrigated agricultural acres enrolled in the BMP Program	1,526,689
Number of enrollments (NOIs)	13,269
Number of NOIs represented in IV site visits	3,938

Rates of BMP enrollment and reporting across the state vary by geographic area and are dependent upon factors such as whether a BMAP has been adopted, the date of BMAP adoption, the number and type of agricultural acres within a BMAP or geographic area, and the quantity of parcels associated with the agricultural acres. Enrollment efforts have previously focused on enrolling parcels that are most impactful to water quality including those with large, irrigated areas, a large number of agricultural acres, and/or more intense agricultural land uses. With limited staff, program efficacy is reduced when enrolling less impactful parcels such as those with very few agricultural acres, unirrigated parcels, those with less intense agricultural land uses, or agricultural activity intended solely for personal use.

To assist with prioritizing enrollment efforts and monitoring progress, FDACS characterizes lands classified as agriculture in FSAID8 but not currently enrolled in the FDACS BMP Program based on owner information, address, and other details at a more granular scale using parcel level data and aerial review. The results of this "unenrolled agricultural lands" characterization provide an indication of which areas are more likely (or unlikely) to have enrollable agricultural activities occurring on them. It also provides insight on where best to focus finite staff resources and efforts by identifying the number of parcels and the associated agricultural acres deemed to be enrollable. The analysis results displayed statewide and by BMAP can be found in **Appendix I**. More information about the characterization can be found in **Appendix III**.

Agricultural acres and NOIs enrolled in each adopted BMAP area are summarized in **Table 2**. The acres within each BMAP area that are characterized as unlikely to have enrollable agricultural activities were subtracted from the BMAP "Agricultural Acres as of December 31, 2021" column in **Table 1**. The adjusted agricultural acres and enrollment percentages are presented in **Table 3**.

10. Information on FSAID is available at https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Water-Supply-Planning.

Table 2. Status of BMP Enrollment Within BMAP Areas

Basin Management Action Plan	Year Adopted	Agricultural Acres as of 12/31/21	Percent of BMAP area that is Agricultural	Agricultural Acres Enrolled	Percent of Agricultural Acres Enrolled
Alafia River Basin	2014	10,410	22	5,105	49
Banana River Lagoon	2013	75	0.1	0	0
Caloosahatchee Estuary Basin	2012	444,635	50	377,358	85
Central Indian River Lagoon*	2013	73,146	21	15,479	21
Chassahowitzka-Homosassa Springs	2019	38,983	12	14,322	37
DeLeon Spring	2019	11,517	18	2,095	18
Everglades West Coast Basin	2012	9,624	17	5,325	55
Gemini Springs	2019	927	3	370	40
Hillsborough River Basin	2009	16,770	33	10,683	64
Jackson Blue Spring and Merritts Mill Pond	2016	41,435	45	27,647	67
Kings Bay and Crystal River Springs	2019	13,442	7	4,025	30
Lake Harney, Lake Monroe, Middle St. Johns River, Smith Canal	2012	26,060	11	8,482	33
Lake Jesup Basin	2010	7,987	8	5,728	72
Lake Okeechobee Basin	2014	1,834,800	47	1,561,494	85
Long Branch	2008	524	14	230	44
Lower St. Johns River Basin Mainstem	2008	150,961	8	69,665	46
Lower St. Johns River Basin Tributaries I and II	2009	1,179	2	713	60
Manatee River Basin	2014	998	6	764	77
Middle and Lower Suwannee River Basin	2018	386,126	29	208,665	54
North Indian River Lagoon	2013	6,687	3	626	9
Orange Creek	2008	68,503	18	26,665	39
Rainbow River and Springs	2015	181,354	42	82,959	46
Santa Fe River Basin	2012	246,163	23	111,056	45
Silver River and Springs	2015	156,155	25	41,270	26
St. Lucie River and Estuary Basin	2013	291,935	54	243,463	83
Upper Ocklawaha River Basin	2007	100,094	18	21,668	22
Upper Wakulla River and Wakulla Springs	2015	60,763	7	13,961	23
Volusia Blue Springs	2018	2,378	3	119	5
Wacissa River and Wacissa Springs	2019	60,555	18	24,965	41
Weeki Wachee Spring and River	2019	48,305	23	25,001	52
Wekiva River, Rock Springs Run and Little Wekiva Canal	2015	50,293	13	10,202	20
Wekiwa Spring and Rock Springs	2018	18,007	9	4,778	27

*FDEP changed this BMAP area boundary in 2021. Consequently, values going forward are not comparable to prior years.

Table 3. Analysis and Characterization of Unenrolled Lands Within BMAP Areas

Basin Management Action Plan Area	Remaining Enrollable Agricultural Acres	Adjusted Agricultural Acres within BMAP	Adjusted % of the BMAP area that is Agricultural	Adjusted % of Agricultural Acres Enrolled	Increase in enrollment % after non-agricultural acres removed
Alafia River Basin	2,833	7,952	17	64	15
Banana River Lagoon	44	44	<1	0	0
Caloosahatchee Estuary Basin	36,603	414,126	46	91	6
Central Indian River Lagoon*	42,498	57,989	16	27	6
Chassahowitzka-Homosassa Springs	14,750	29,085	9	49	12
DeLeon Spring	6,026	8,129	12	26	8
Everglades West Coast Basin	1,434	6,764	12	79	24
Gemini Springs	187	557	2	66	26
Hillsborough River Basin	4,047	14,755	29	73	9
Jackson Blue Spring and Merritts Mill Pond	8,916	36,608	39	76	9
Kings Bay and Crystal River Springs	5,437	9,462	5	43	13
Lake Harney, Lake Monroe, Middle St. Johns River, Smith Canal	11,335	19,833	8	43	10
Lake Jesup Basin	907	6,640	7	86	14
Lake Okeechobee Basin	55,054	1,617,151	41	97	12
Long Branch	167	397	11	58	14
Lower St. Johns River Basin Mainstem	41,839	111,651	6	63	17
Lower St. Johns River Basin Tributaries I and II	115	827	1	86	26
Manatee River Basin	110	880	5	87	10
Middle and Lower Suwannee River Basin	121,868	330,745	25	63	9
North Indian River Lagoon	3,332	3,956	2	16	7
Orange Creek	26,274	52,969	14	50	11
Rainbow River and Springs	80,211	163,244	38	51	5
Santa Fe River Basin	88,567	199,761	19	56	11
Silver River and Springs	81,364	122,700	19	34	8
St. Lucie River and Estuary Basin	24,634	268,200	50	91	8
Upper Ocklawaha River Basin	41,069	62,879	11	35	13
Upper Wakulla River and Wakulla Springs	23,865	37,845	4	37	14
Volusia Blue Springs	1,249	1,368	2	9	4

*FDEP changed this BMAP area boundary in 2021. Consequently, values going forward are not comparable to prior years.

Table 3. Continued

Basin Management Action Plan Area	Remaining Enrollable Agricultural Acres	Adjusted Agricultural Acres within BMAP	Adjusted % of the BMAP area that is Agricultural	Adjusted % of Agricultural Acres Enrolled	Increase in enrollment % after non-agricultural acres removed
Wacissa River and Wacissa Springs	23,527	48,506	15	51	10
Weeki Wachee Spring and River	17,517	42,530	20	59	7
Wekiva River, Rock Springs Run and Little Wekiva Canal	19,084	29,319	7	35	15
Wekiwa Spring and Rock Springs	4,955	9,755	5	49	22

*FDEP changed this BMAP area boundary in 2021. Consequently, values going forward are not comparable to prior years.

Implementation Verification Site Visits

Florida law requires FDACS to conduct an IV site visit at least every two years to ensure that agricultural landowners and producers are properly implementing the applicable BMPs identified in their NOIs [11]. An IV site visit includes: a review of nutrient records that producers must maintain to demonstrate compliance with the BMP Program; verification that all other applicable BMPs are being properly implemented; verification that cost-share practices are being properly implemented; and identification of potential cost-share practices, projects or other applicable BMPs not identified during enrollment. During the IV site visit, FDACS representatives also identify opportunities for achieving greater nutrient, irrigation, or water resource management efficiencies, or further opportunities for water conservation.

The requirements of the Clean Waterways Act and the directives of the Northern Everglades BMAPs impact some of the metrics in this report. While most of the enrollment data covers calendar year 2021, Table 4 also provides data on the 18-month period since the Clean Waterways Act came into effect. Per the new requirements, NOIs within BMAP areas need IV site visits every two years from the date they are: enrolled in the BMP Program; receive an IV site visit or implementation assistance follow-up visit (see next section); or from 7/1/2020, whichever date is most recent. The IV site visits conducted in 2021 and the number of IV site visits conducted since July 1, 2020, are summarized by BMAP in Table 4. In 2021, over 3,900 IV site visits were performed statewide out of 13,269 NOIs representing 20 percent (20%) of all agricultural acres enrolled in the BMP Program.

There are 117 producers located within the Lake Okeechobee watershed's Everglades Agricultural Area and C-139 Basin that implement BMPs regulated under Chapter 40E-63, F.A.C. and are deemed in compliance with the FDACS BMP Program if they are in compliance with their South Florida Water Management District (SFWMD) permits. As SFWMD conducts its own site visits and collects records to ensure compliance, FDACS did not conduct IV visits on these parcels. Similarly, FDACS does not conduct IV site visits on those portions of production parcels regulated under another agency's permitting framework, such as permitted dairy operations or activities permitted under an FDEP biosolids nutrient management plan.

11. Section 403.067(7)(c)2., F.S.

Requirements to retain certain records pertaining to the application of nitrogen and phosphorus fertilizer during IV site visits began on July 1, 2020. Pursuant to rulemaking efforts, the OAWP amended Chapter 5M-1, F.A.C., and adopted by reference a Nutrient Application Record Form (NARF) to help simplify the record keeping requirements across BMP manuals. While the NARF provides a uniform spreadsheet on which to enter data and manage records, OAWP staff continue to work with their counterparts at FDEP on a Memorandum of Agreement to memorialize the nutrient data collection process. Currently, data are aggregated by BMAP or sub-basin and submitted to FDEP upon request. Preliminary results indicate success in establishing a baseline of annual nutrient application on enrolled operations, and within specific basins or sub-basins. For operations where improved BMP implementation is needed, OAWP collaborates with producers to establish Nutrient Efficiency Plans to implement additional mitigating BMPs to increase nutrient management efficiency and reduce the risk of nutrient loss to the surrounding water resources.

Table 4. Status of IVs in BMAPs since July 1, 2020 (no adjustment for IVs referred to DEP)

BMAPs	Number of active NOIs on 7/1/2020	Number of IV site visits 7/1/2020 - 12/31/2021	Percent of active NOIs on 7/1/2020 with IV site visits	Number of IV site visits performed in calendar year 2021
Alafia River Basin	100	45	45%	26
Banana River Lagoon	0	0	-	-
Caloosahatchee River and Estuary Basin	368	315	86%	207
Central Indian River Lagoon	101	76	75%	24
Chassahowitzka-Homosassa Springs	113	83	73%	51
DeLeon Spring	29	24	83%	22
Everglades West Coast Basin	15	11	73%	6
Gemini Springs	7	2	29%	1
Hillsborough River Basin	57	25	44%	17
Jackson Blue Spring and Merritts Mill Pond	231	167	72%	51
Kings Bay and Crystal River Springs	27	24	89%	15
Lake Harney, Lake Monroe, Middle St. Johns River and Smith Canal	25	10	40%	74
Lake Jesup Basin	43	13	30%	3
Lake Okeechobee Basin	2,322	2,102	91%	1,271
Long Branch	1	1	100%	1
Lower St. Johns River Basin Main Stem	302	209	69%	117
Lower St. Johns River Basin Tributaries I and II	4	4	100%	1
Manatee River Basin	5	3	60%	1
Middle and Lower Suwannee River Basin	1,333	857	64%	578
North Indian River Lagoon	14	6	43%	3

Table 4. Continued

BMAPs	Number of active NOIs on 7/1/2020	Number of IV site visits 7/1/2020 - 12/31/2021	Percent of active NOIs on 7/1/2020 with IV site visits	Number of IV site visits performed in calendar year 2021
Orange Creek	209	140	67%	49
Rainbow River and Springs	471	371	79%	194
Santa Fe River Basin	768	476	62%	317
Silver River and Springs	349	291	83%	98
St. Lucie River and Estuary Basin	446	366	82%	254
Upper Ocklawaha River Basin	323	240	74%	67
Upper Wakulla River and Wakulla Spring	108	28	26%	15
Volusia Blue Springs	6	3	50%	3
Wacissa River and Wacissa Springs	84	71	85%	39
Weeki Wachee Spring and River	91	66	73%	24
Wekiva River, Rock Springs Run, and Little Wekiva Canal	247	196	79%	71
Wekiwa Spring and Rock Springs	144	121	84%	48

Implementation Assistance

During an IV site visit, FDACS staff may identify BMPs that are not being properly implemented. If this occurs, the Implementation Assistance process must be followed to ensure compliance with the BMP Program requirements.[12] The FDACS representative will provide the landowner or producer with a list of corrective measures and the timeframes within which they must be completed. The landowner or producer must acknowledge receipt of these requirements and will execute a new BMP Checklist or corrective measures form. If the producer does not fully implement the identified corrective measures within the established timeframes, FDACS will issue a letter of non-compliance identifying remedial measures to be taken by the producer and, if necessary, the landowner, to achieve proper implementation of applicable BMPs. FDACS representatives will schedule follow-up site visits to verify the completion of corrective or remedial measures within the established timeframes. In no case shall the overall timeframe for completion of corrective or remedial measures extend beyond the date of the next implementation verification site visit.

If a producer or landowner does not cooperate with FDACS to identify or implement corrective or remedial measures, FDACS must refer them to FDEP for enforcement action.[13] These procedures are slightly different from those used by FDACS and FDEP to refer those producers who do not enroll in the BMP Program to the water quality monitoring requirements under Chapter 62-307, F.A.C. For example, agricultural landowners and producers enrolled in the BMP Program remain eligible for cost-share funding during the Implementation Assistance timeframe, based on the eligibility requirements of the cost-share program.

12. Chapter 5M-1.009, F.A.C.
13. Ibid.

In 2021, 3,938 IV site visits were performed, of which 113 NOIs were placed in Implementation Assistance, with 84 of those resolved as of this reporting. Of the 29 unresolved NOIs, remedial measures were implemented for one and the remaining 28 NOIs are pending. The results of the IV site visits demonstrate that most of the enrolled landowners or producers are properly implementing the applicable BMPs that were identified on their parcel. It should be noted, however, that during many IV site visits, staff identified the need for increased education and assistance regarding the collection and retention of fertilizer application information. The most common types of corrective measures involved deficiencies in record keeping, soil or tissue testing, or exceeding fertilizer application rates.

BMP Cost-Share

The BMP cost-share program has greatly enhanced the implementation of BMPs and other practices and projects, especially in priority areas where precision nutrient management strategies have the greatest impact on water quality. The cost-share program makes innovative agricultural production methods available to producers so that they can meet water quality goals while remaining financially viable, and enables FDACS to help producers improve nutrient use efficiency, reduce inputs, and conserve water. Cost-share for large-scale, regional innovative technologies is provided in South Florida through Fixed Capital Outlay (FCO) funding.

During 2021, 434 cost-share projects were completed statewide. Table 5 lists the total amount of cost-share reimbursements for projects completed in 2021 for each BMAP area as well as a total for areas outside of BMAPs. The total cost-share reimbursement for projects completed in 2021 was $13,049,483. The sum of the "Total Costs of Projects Completed in 2021" column in Table 5 is higher than actual cost-share reimbursement because some BMAP boundaries overlap. In fact, some projects overlap into two or more BMAP areas. The total cost-share expended in 2021 was less than that in 2020 due to reduced expenditures of FCO funds typically provided for large regional projects. With larger projects, the timing of engineering, designing, permitting, securing of easements and other activities result in expenditures varying greatly from year to year.

Table 5. Cost-Share for Projects Completed in 2021 by BMAP

BMAP Name	Total Costs of Projects Completed in 2021
Alafia River Basin	$0
Banana River Lagoon	$0
Caloosahatchee Estuary Basin	$522,938
Central Indian River Lagoon	$46,275
Chassahowitzka-Homosassa Springs	$46,223
DeLeon Spring	$125,088
Everglades West Coast	$0
Gemini Spring	$0
Hillsborough River Basin	$0
Jackson Blue Spring	$823,341
Kings Bay and Crystal River Springs	$0
Lakes Harney, Monroe, Middle St Johns River, Smith Canal	$17,925
Lake Jesup	$6,660
Lake Okeechobee Basin	$1,690,662
Long Branch	$0
Lower St. Johns River Basin Main Stem	$1,500,969
Lower St. Johns River Basin Tributaries I and II	$0
Manatee River Basin	$0
Middle and Lower Suwannee River Basin	$1,239,587
North Indian River Lagoon	$0
Orange Creek	$28,762
Rainbow River and Springs	$390,760
Santa Fe River Basin	$518,620
Silver River and Springs	$96,635
St. Lucie River and Estuary Basin	$906,234
Upper Ocklawaha River Basin	$79,088
Upper Wakulla River and Wakulla Spring	$87,354
Volusia Blue Springs	$0

Table 5. Continued

BMAP Name	Total Costs of Projects Completed in 2021
Wacissa River and Wacissa Springs	$179,965
Weeki Wachee Spring and River	$119,108
Wekiva River, Rock Springs Run, and Little Wekiva Canal	$103,104
Wekiwa Spring and Rock Springs	$44,518
Outside of BMAP areas	$4,475,619

The total amount of cost-share reimbursement for projects completed in 2021 for each BMP category is shown in **Table 6**.

Table 6. Cost-Share for All Projects Completed Statewide in 2021 by BMP Category

BMP Category	Total Costs of Projects Completed in 2021
Nutrient Management	$5,306,884
Irrigation Management	$5,060,808
Water Resource Protection	$2,681,791

BMP Program Improvements

The OAWP continued to update and refine enrollment, reporting, and educational tools to reflect programmatic needs and legislative direction. Substantial improvements to the BMP Program in 2021 included:

- Developing new data quality feedback tools, staff training tools, instructional videos, and web resources for staff to meet enrollment and IV site visit requirements and assist with record keeping for compliance and retention purposes. These tools are essential for helping with data standardization, improving reporting efficiency, and assisting producers and staff with meeting the requirements of law.

- Hiring a business analyst to review the current data system, find data management gaps, identify quality assurance measures, and suggest redesign options to help OAWP track and store all data more efficiently and visualize current data more accurately.

- Working with software providers to design and build tools to assist staff with data analysis and aggregation for more efficient BMP Program implementation and outreach.

- Developing technical assistance tools to help producers identify applicable BMPs that will result in the greatest benefits to water resources and generate a post-IV summary of any additional applicable BMPs, implementation assistance, and any cost-share opportunities.

- Improving GIS agricultural land use classifications and undertaking more complex analyses of underlying land use codes for those properties identified as agriculture within BMAPs. This is helping to improve data accuracy on agricultural production acreage throughout the state by clarifying those land uses that are enrollable under the BMP Program, improving identification of rural residences, smaller diversified agricultural operations, fallow lands, and other land uses within the FDACS mapping database that require future policy consideration.

- Subsidizing field staff efforts through staff augmentation contracts with the Soil and Water Conservation Districts (SWCD) to address the workload associated with the requirements of the Clean Waterways Act. OAWP paid $1,097,418 for twenty-two SWCD technicians during calendar year 2021.

- Prioritizing BMP Program enrollments within BMAP areas and for parcels where enrollment and proper implementation of the applicable BMPs will achieve the greatest benefits to water resources from nutrient reduction. It should be noted that producers who indicated a desire to enroll as a result of the Northern Everglades BMAP mailout effort are still pending due to continued staffing issues.

- Targeting cost-share funding within BMAP areas to achieve the greatest water resource benefits, and improving the process for tracking the use of cost-share funding.

- Supporting research in cooperation with the University of Florida Institute of Food and Agricultural Sciences (IFAS) and other state universities and Florida College System institutions that have agricultural research programs to provide scientific and technical assistance to the FDACS BMP Program.

Next Steps

Additional adjustments to the BMP Program will be implemented over the next year to provide OAWP with the ability to support the agricultural and water quality goals of the state, including:

- Requesting additional positions and funding through the Legislative process. The increased workload required to meet statutory demands coupled with a greater than 20% field staff vacancy rate resulted in significant staffing shortages in 2021. OAWP requested 27 additional FTEs during the 2022 Legislative session, but only 10 positions were approved for fiscal year 2022/2023. Additional staffing is required to successfully implement the requirements of the Clean Waterways Act.

- Maintaining partnerships with the Soil and Water Conservation Districts to contract for additional BMP technicians to assist OAWP in implementing its statutory obligations.

- Updating each BMP manual to address statutory changes and achieve consistency in formatting, and to examine and incorporate, where appropriate, new BMPs that will improve nutrient and irrigation use efficiency.

- Improving contract management processes and coordination with state agencies and Soil and Water Conservation District partners to identify and prioritize eligible practices and projects to ensure the efficient and effective use of cost-share funds to achieve water resource conservation goals.

- Undertaking targeted research projects in coordination with other agencies, educational institutions, water management districts, and stakeholder partners, to support existing BMPs and develop new, innovative practices for improving nutrient and irrigation efficiencies.

- Conducting additional agricultural land use characterizations for each BMAP area to help focus enrollment and cost-share funding that will provide the greatest benefits to water resources through nutrient reduction.

- Testing and implementing GIS mapping improvements for BMP enrollment data. These improvements will enable staff to visualize updated IV site visit statuses and enrollment coverage on a daily basis.

- Continuing work with the Environmental Systems Research Institute (ESRI) on transitioning the IV process to a digital format to reduce paperwork and the amount of time needed for staff to complete an IV.

- Continuing work with cooperative agency partners including FDEP, the water management districts and local government agencies to better characterize and identify effective solutions to protect and conserve the water resources while maintaining the viability of agricultural production throughout Florida. Most formalized coordination occurs in the Northern Everglades and Estuaries Protection Plan area of South Florida where there are regular executive meetings, program update meetings, and technical staff workgroups among the coordinating agencies (FDACS, SFWMD and FDEP).

Acknowledgements

The collection and presentation of the data in this report would not be possible without the dedication of the OAWP staff responsible for undertaking the required site visits, the data management and policy staff tasked with analyzing and compiling the data, and the project manager responsible for ensuring delivery of the final report.

Appendix I: Summary of BMP Implementation Statewide and by Basin Management Action Plan

This section provides information on the status of the BMP Program and a characterization of lands remaining to be enrolled statewide and for each BMAP area. Included are:

- A breakdown of the agricultural lands within the area of interest by enrollment status and potential applicability for BMP enrollment
- The number of enrollments and corresponding IV site visits
- A distribution, by acreage, of the unenrolled lands that are potentially enrollable
- The currently enrolled agricultural acreages by BMP Program manual

It is important to note that several BMAP boundaries overlap, which may result in some NOIs and BMP enrollment acres being counted in more than one BMAP. This means that the sum of the NOIs or NOI acreages in the various BMAPs is likely to be imprecise and may not match statewide values. The statewide summary page captures data from all enrolled parcels, both inside and outside of BMAP areas.

As BMAPs vary in size and land use, knowing what percent of the BMAP is in agricultural use is highly indicative of potential agricultural significance in the restoration strategy. OAWP used FSAID8 as the starting point for estimating agricultural acreages and executed additional land use characterization analyses to prioritize enrollment efforts.

The first table and set of charts in the one-page summaries contain:

- The non-agricultural acreages
- The agricultural acreages
- The enrolled agricultural acreages based on FSAID8 and OAWP BMP enrollment as of December 31, 2021

FSAID8 features outside the enrolled areas are captured as agricultural acres remaining to be enrolled. Oftentimes, there are lands initially identified as agriculture, and upon closer evaluation, there are questions as to whether there is agricultural activity and if it is enrollable within the purview of OAWP. For example, some of the remaining acreages are within state-owned lands and/or water restoration project boundaries where there is a low probability they contain enrollable agricultural activity. As a result, these acres are excluded from the characterization analyses. With the state-owned lands and water restoration project projects removed, analyses are performed using property appraiser data such as: parcel owner information, agricultural tax valuation for exemption purposes, other parcel land use detail and aerial imagery to determine whether the remaining lands are unlikely to contain relevant agricultural activity or are potentially enrollable. The potentially enrollable acres most accurately represent where the program stands in terms of achieving the 100% enrollment metric within BMAP areas. A detailed characterization methodology can be found in **Appendix III**.

The Enrollment and IV Site Visit Summary table provides:

- The total agricultural acres within the area of interest and the total enrolled acres
- The total irrigated acres and the enrolled irrigated acres
- The number of NOIs associated with the enrolled acres, and how many of those NOIs have had an implementation verification visit.

To estimate the agricultural acres enrolled in the BMP Program, OAWP overlayed FSAID8 and BMP enrollment data within GIS to calculate the acres of agricultural land in an enrolled parcel and how many of those acres are irrigated. Enrollment prioritization of agricultural operations with irrigation systems is important because these operations may result in greater impacts to the water resources of the state. In terms of NOIs, the count of NOIs and enrolled acreage fluctuates when parcels are sold, when leases end or change tenancy, or when production areas downsize or production ceases, among other reasons. For more detail on the progress of implementation verification site visits go to Implementation Verification Site Visits section.

The Potentially Enrollable Parcel Distribution by Agricultural Acreage table examines the unenrolled acres found to be potentially enrollable in the land use characterization. The parcels are distributed into bins based on the agricultural acres present within each parcel. The parcel count and the total acres of agriculture encompassed by the parcels are provided for each bin. The number of parcels in each bin is a useful proxy for the level of resource dedication needed to enroll the associated agricultural acres. This provides insight when evaluating where best to focus finite resources and staffing needs to meet the enrollment goals outlined in the BMAPs. In some BMAPs, much of the potentially enrollable acreage is encompassed within smaller parcels which may require additional resources to evaluate and/or enroll.

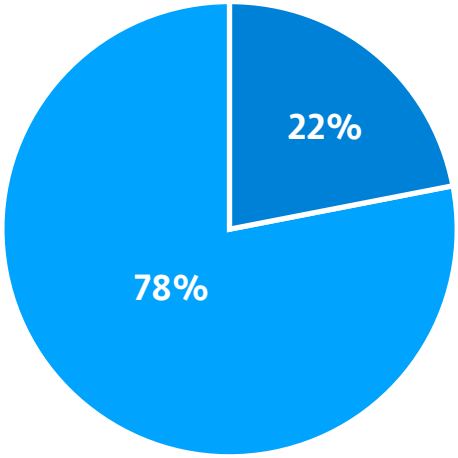
The Agricultural Acres Enrolled table shows the acreages enrolled in the BMP Program by commodity. It is important to note that producers often undertake the production of multiple commodities on their operations, resulting in the requirement to implement the applicable BMPs from more than one BMP manual. When this occurs, the acres enrolled under more than one BMP manual are classified as “multiple commodity” and not included in the individual commodity totals to prevent duplication.

Status of Implementation of Agricultural Best Management Practices (BMPs)

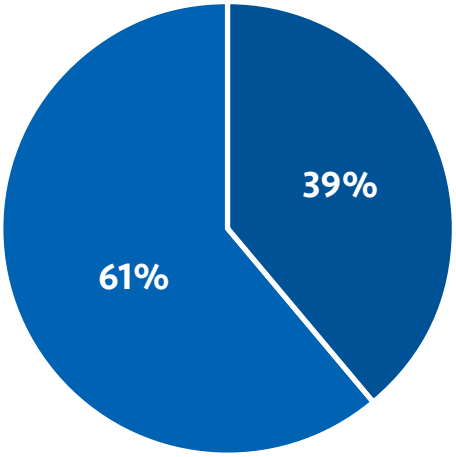
Statewide

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
26,723,359	7,596,641	4,628,627	2,968,014	884,291	1,851,559

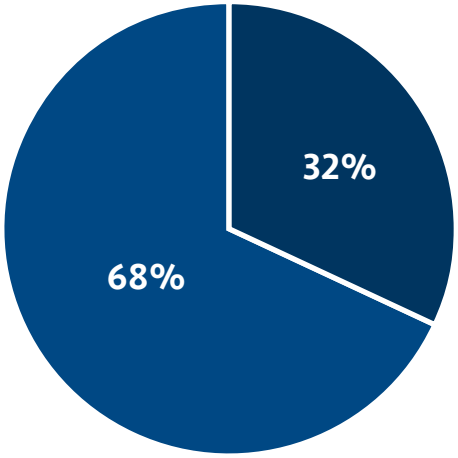
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the state	7,596,641	61%
Total agricultural acres enrolled	4,628,627	
Total irrigated acres	1,862,717	82%
Total irrigated acres enrolled	1,526,689	
Number of NOIs statewide	13,269	
Completed IV site visits	3,938	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	2,984	1,610
1 - 25	52,005	468,885
25 - < 50	8,580	298,416
50 - < 250	6,187	596,906
≥ 250	971	485,742
TOTAL	70,727	1,851,559

Agricultural Acres Enrolled

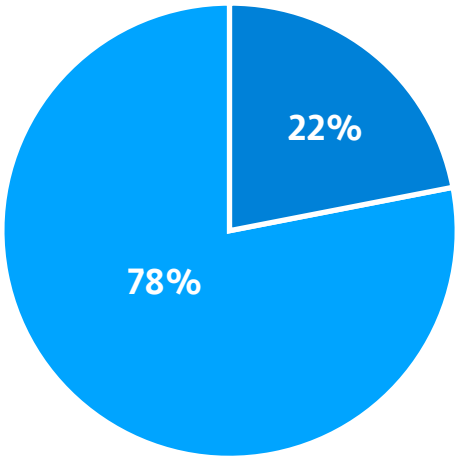
BMP Manuals	Acres
Citrus	445,806
Conservation Plan	182,280
Cow/Calf	1,684,597
Dairy	13,227
Equine	20,071
Fruit & Nut	16,615
Lake Okeechobee PP	2,476
Multiple Commodities	1,172,097
Nursery	32,246
Poultry	1,024
Row/Field Crops	1,018,521
Sod	26,321
Wildlife	13,346
TOTAL	4,628,627

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

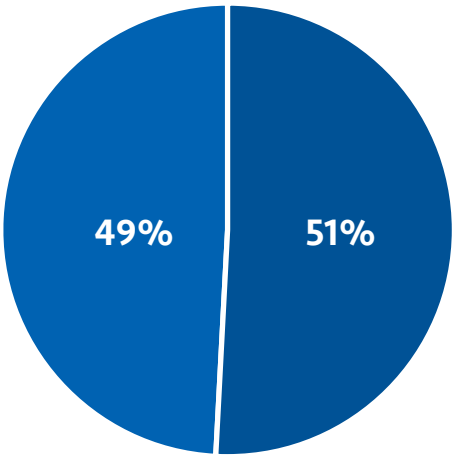
Status of Implementation of Agricultural Best Management Practices (BMPs)
Alafia River BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
36,789	10,410	5,105	5,298	2,468	2,833

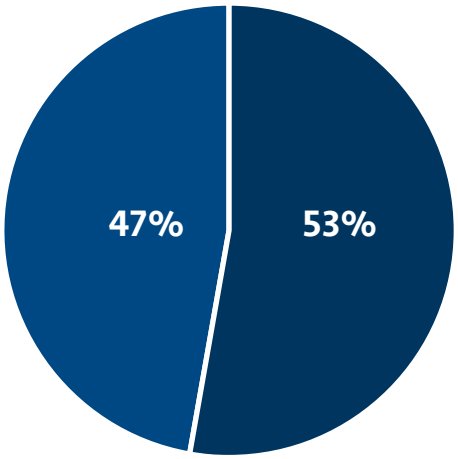
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	10,410	49%
Total agricultural acres enrolled	5,105	
Total irrigated acres	3,286	67%
Total irrigated acres enrolled	2,204	
Number of NOIs within BMAP	95	
Completed IV site visits	26	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	32	20
1 - 25	289	1,795
25 - < 50	15	489
50 - < 250	6	529
≥ 250	971	485,742
TOTAL	342	2,833

Agricultural Acres Enrolled

BMP Manuals	Acres
Cow/Calf	1,592
Equine	29
Fruit & Nut	77
Multiple Commodities	891
Nursery	246
Row/Field Crops	2,270
TOTAL	5,105

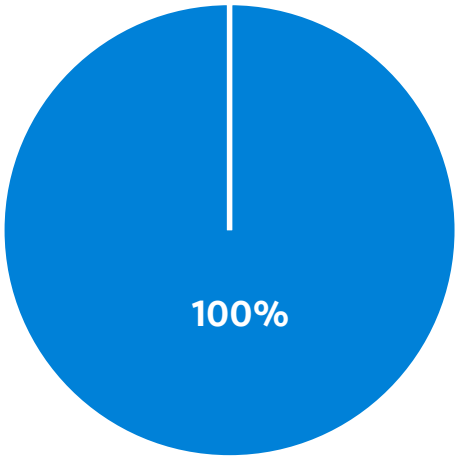
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

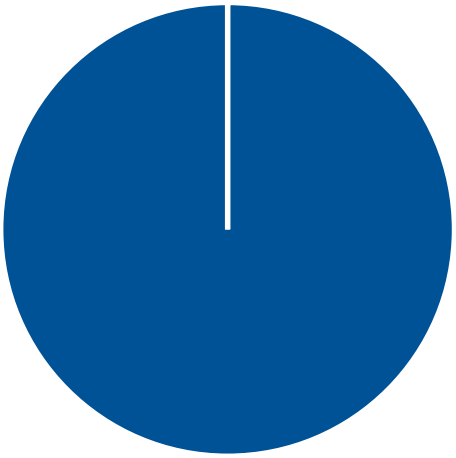
Banana River Lagoon BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
97,855	75	0	75	31	44

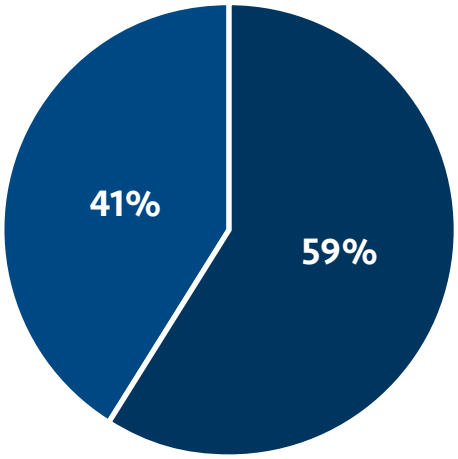
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	75	0%
Total agricultural acres enrolled	0	
Total irrigated acres	4	0%
Total irrigated acres enrolled	0	
Number of NOIs within BMAP	0	
Completed IV site visits	0	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	1	< 1
1 - 25	2	4
25 - < 50	1	39
TOTAL	4	44

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	0
Equine	0
Fruit & Nut	0
Multiple Commodities	0
Nursery	0
Row/Field Crops	0
Sod	0
TOTAL	0

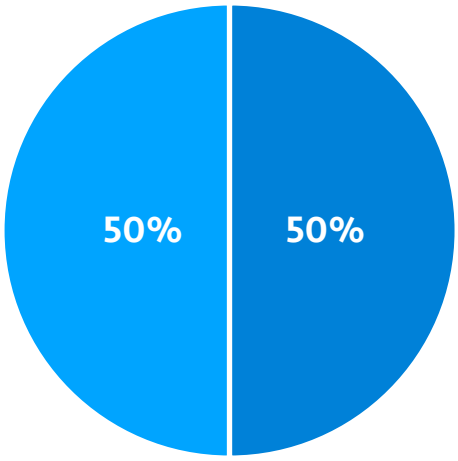
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

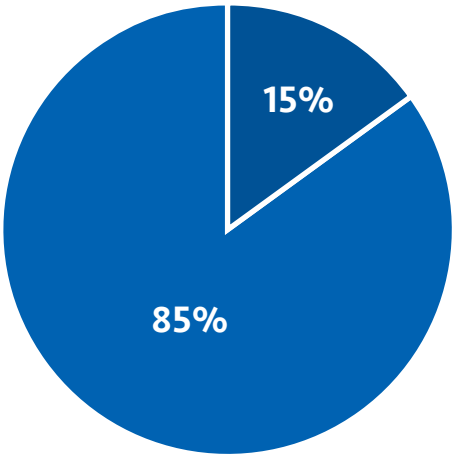
Caloosahatchee River and Estuary BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
449,306	444,635	377,358	67,277	13,966	36,603

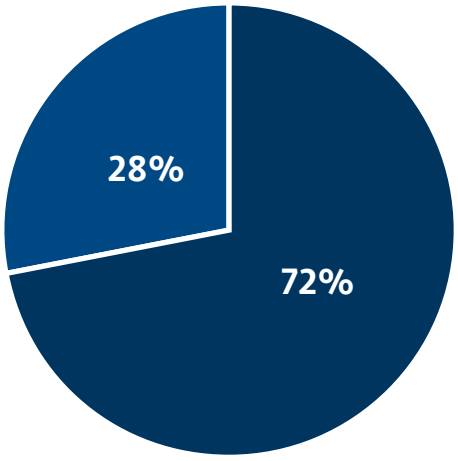
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	444,635	85%
Total agricultural acres enrolled	377,358	
Total irrigated acres	188,050	93%
Total irrigated acres enrolled	174,329	
Number of NOIs within BMAP	497	
Completed IV site visits	207	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	51	29
1 - 25	1,115	10,186
25 - < 50	177	6,307
50 - < 250	115	12,111
≥ 250	19	7,696
TOTAL	1,477	36,603

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	52,678
Conservation Plan	43,853
Cow/Calf	98,537
Fruit & Nut	349
Multiple Commodities	93,932
Nursery	676
Poultry	56
Row/Field Crops	86,336
Sod	941
TOTAL	377,358

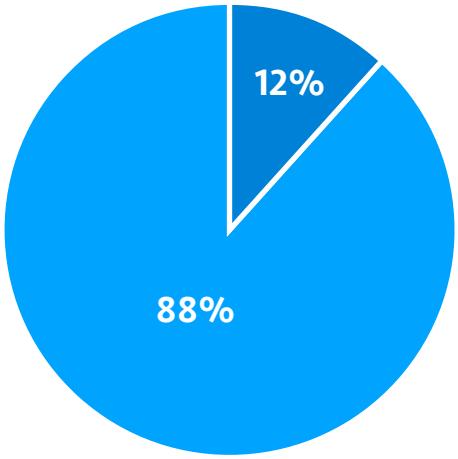
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

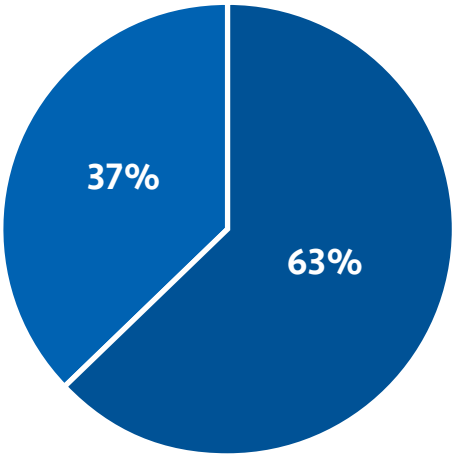
Chassahowitzka-Homosassa Springs BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
286,999	38,983	14,322	24,661	8,299	14,750

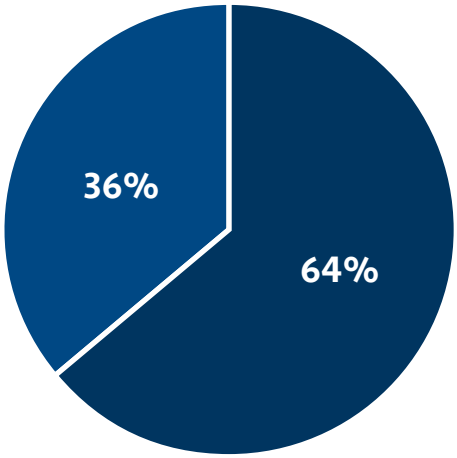
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	38,983	37%
Total agricultural acres enrolled	14,322	
Total irrigated acres	1,924	74%
Total irrigated acres enrolled	1,432	
Number of NOIs within BMAP	98	
Completed IV site visits	51	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	22	15
1 - 25	655	6,042
25 - < 50	105	3,701
50 - < 250	47	4,726
≥ 250	1	266
TOTAL	830	42,498

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	82
Cow/Calf	10,023
Dairy	260
Equine	20
Fruit & Nut	292
Multiple Commodities	2,303
Nursery	881
Row/Field Crops	461
TOTAL	14,322

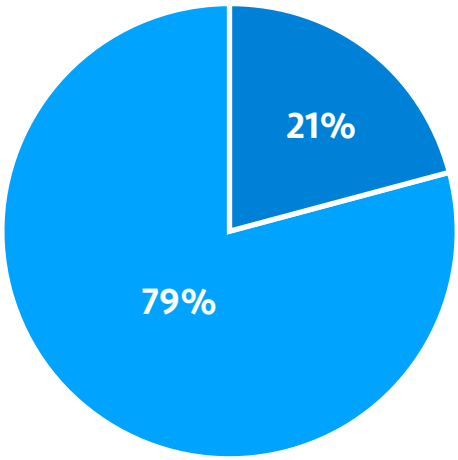
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

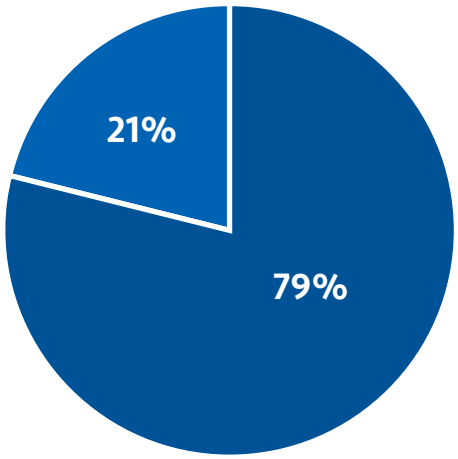
Central Indian River Lagoon BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
282,279	73,146	15,479	57,667	11,235	42,498

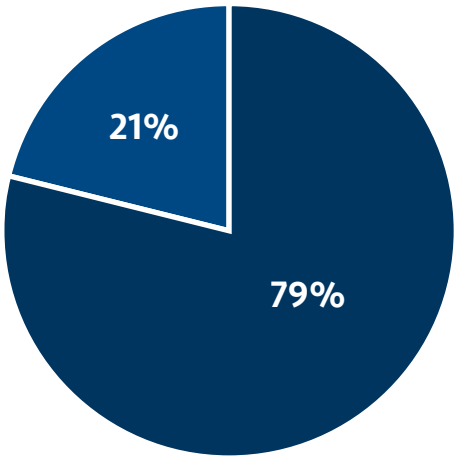
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	73,146	21%
Total agricultural acres enrolled	15,479	
Total irrigated acres	13,455	53%
Total irrigated acres enrolled	7,142	
Number of NOIs within BMAP	110	
Completed IV site visits	24	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	56	40
1 - 25	997	9,301
25 - < 50	226	7,874
50 - < 250	152	14,945
≥ 250	21	10,338
TOTAL	1,452	42,498

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	3,498
Cow/Calf	9,972
Equine	22
Multiple Commodities	1,024
Nursery	170
Row/Field Crops	793
TOTAL	15,479

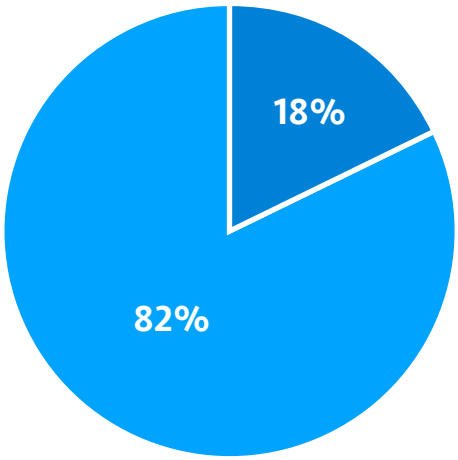
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

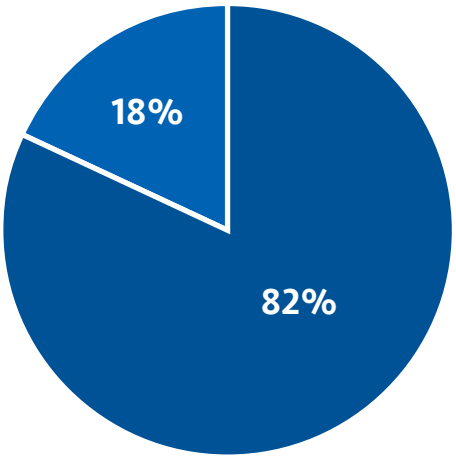
DeLeon Spring BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
53,875	11,517	2,095	9,422	2,991	6,026

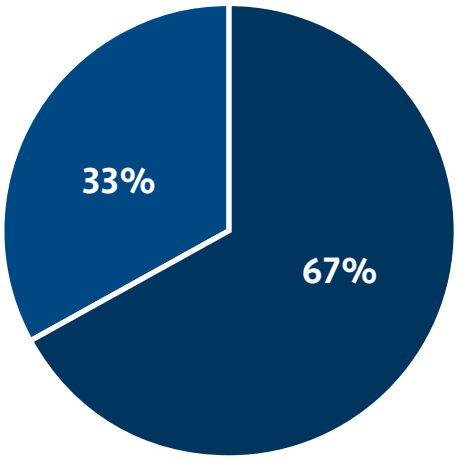
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	11,517	18%
Total agricultural acres enrolled	2,095	
Total irrigated acres	2,211	32%
Total irrigated acres enrolled	716	
Number of NOIs within BMAP	28	
Completed IV site visits	22	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	41	21
1 - 25	499	3,813
25 - < 50	24	846
50 - < 250	15	1,346
TOTAL	579	6,026

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	155
Cow/Calf	820
Equine	151
Fruit & Nut	27
Multiple Commodities	63
Nursery	879
TOTAL	2,095

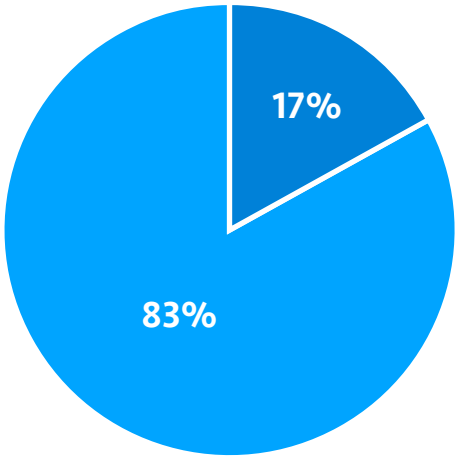
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

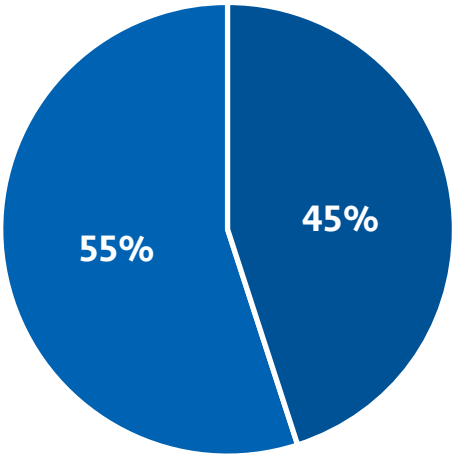
Everglades West Coast BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
45,845	9,624	5,325	4,299	2,609	1,434

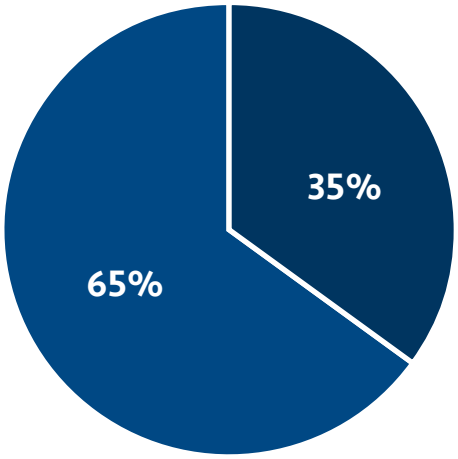
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	9,624	55%
Total agricultural acres enrolled	5,325	
Total irrigated acres	3,572	91%
Total irrigated acres enrolled	3,237	
Number of NOIs within BMAP	14	
Completed IV site visits	6	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	23	226
1 - 25	2	91
25 - < 50	9	1,117
TOTAL	34	1,434

Agricultural Acres Enrolled

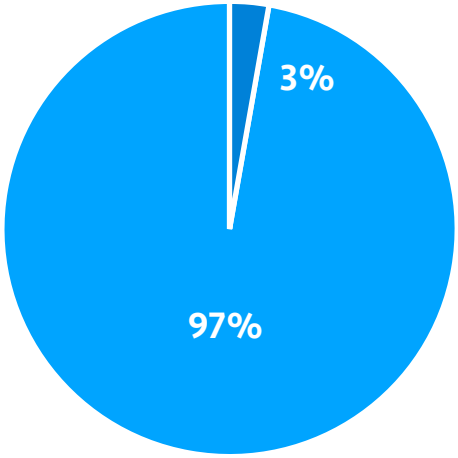
BMP Manuals	Acres
Citrus	634
Cow/Calf	450
Multiple Commodities	96
Nursery	41
Row/Field Crop	4,104
TOTAL	5,325

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

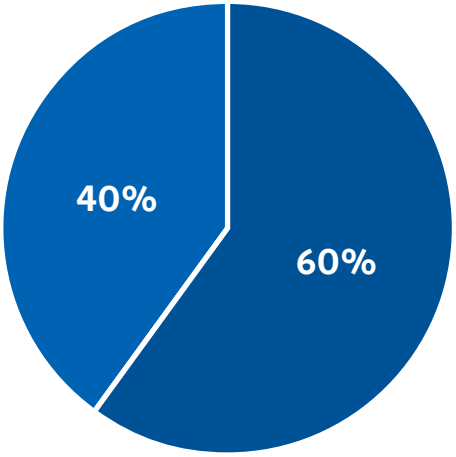
Status of Implementation of Agricultural Best Management Practices (BMPs)
Gemini Springs BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
26,363	927	370	557	370	187

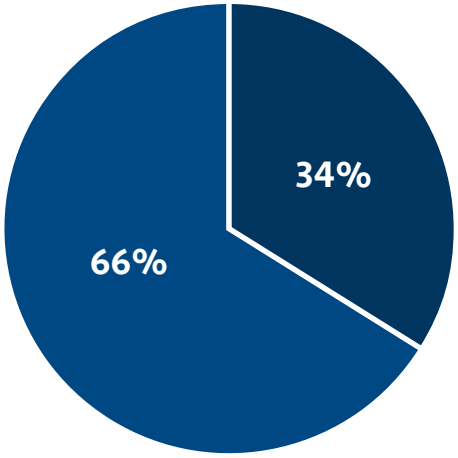
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	927	40%
Total agricultural acres enrolled	370	
Total irrigated acres	38	50%
Total irrigated acres enrolled	19	
Number of NOIs within BMAP	7	
Completed IV site visits	1	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	9	6
1 - 25	20	110
25 - < 50	1	71
TOTAL	30	187

Agricultural Acres Enrolled

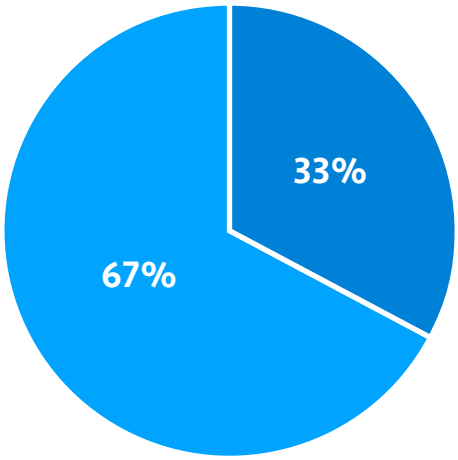
BMP Manuals	Acres
Citrus	5
Cow/Calf	342
Nursery	23
TOTAL	370

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

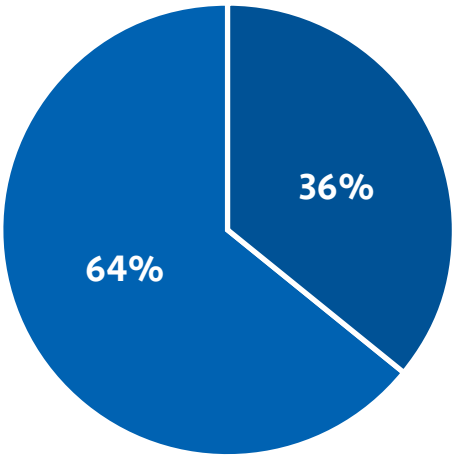
Status of Implementation of Agricultural Best Management Practices (BMPs)
Hillsborough River BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
33,973	16,770	10,683	6,087	2,023	4,047

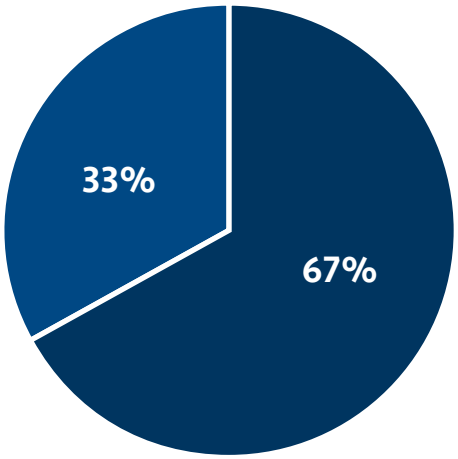
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	16,770	64%
Total agricultural acres enrolled	10,683	
Total irrigated acres	757	70%
Total irrigated acres enrolled	531	
Number of NOIs within BMAP	54	
Completed IV site visits	17	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	31	22
1 - 25	249	1,966
25 - < 50	20	697
50 - < 250	9	1,083
≥ 250	1	278
TOTAL	310	4,047

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	1
Cow/Calf	9,463
Equine	5
Multiple Commodities	472
Nursery	10
Row/Field Crop	732
TOTAL	10,683

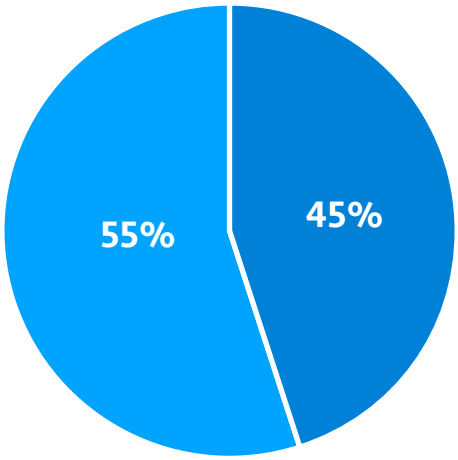
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

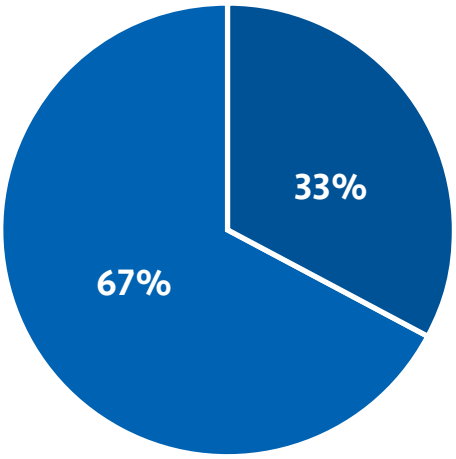
Jackson Blue Spring BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
51,248	41,435	27,647	13,788	4,826	8,916

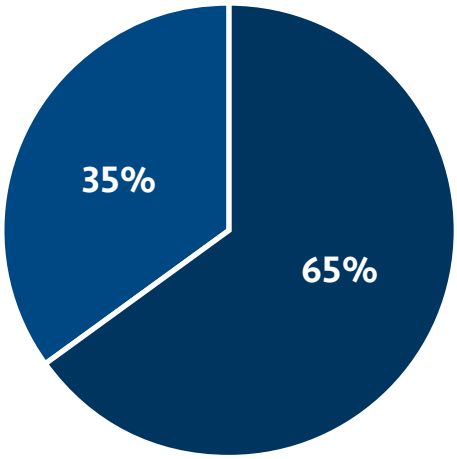
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	41,435	67%
Total agricultural acres enrolled	27,647	
Total irrigated acres	14,248	93%
Total irrigated acres enrolled	13,318	
Number of NOIs within BMAP	176	
Completed IV site visits	51	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	6	4
1 - 25	402	3,911
25 - < 50	80	2,752
50 - < 250	24	1,882
≥ 250	1	367
TOTAL	513	8,916

Agricultural Acres Enrolled

BMP Manuals	Acres
Cow/Calf	2,067
Multiple Commodities	5,188
Row/Field Crop	20,392
TOTAL	27,647

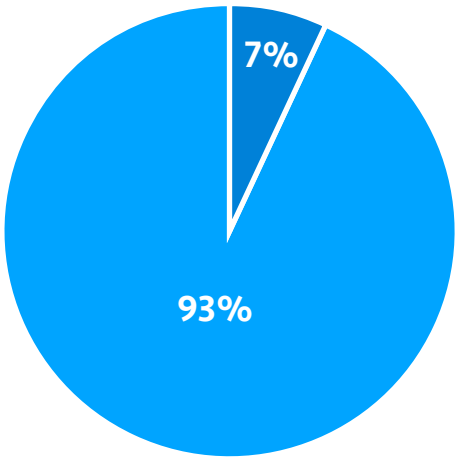
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

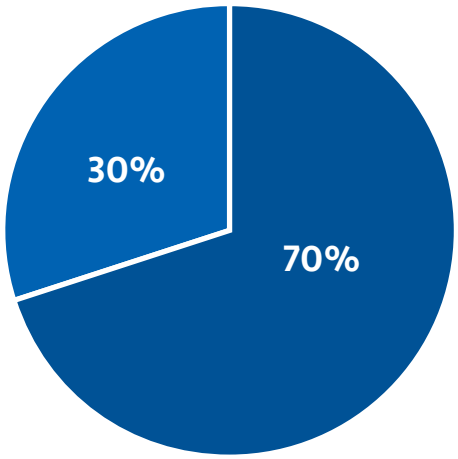
Kings Bay Crystal River Springs BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
166,840	13,442	4,025	9,417	3,129	5,437

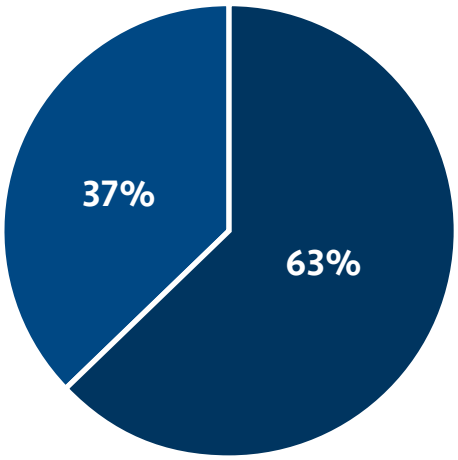
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	13,442	30%
Total agricultural acres enrolled	4,025	
Total irrigated acres	331	32%
Total irrigated acres enrolled	107	
Number of NOIs within BMAP	42	
Completed IV site visits	15	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	13	5
1 - 25	181	1,505
25 - < 50	37	1,253
50 - < 250	26	2,189
≥ 250	1	486
TOTAL	258	5,437

Agricultural Acres Enrolled

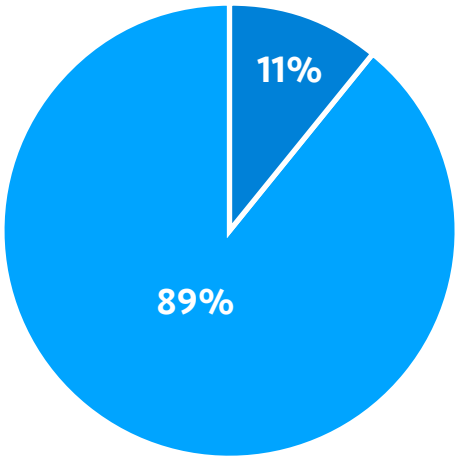
BMP Manuals	Acres
Cow/Calf	2,285
Fruit/Nut	175
Multiple Commodities	861
Nursery	2
Row/Field Crop	702
TOTAL	4,025

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

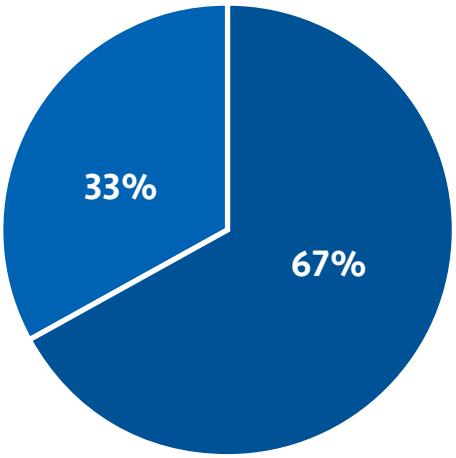
Status of Implementation of Agricultural Best Management Practices (BMPs)
Lake Harney, Lake Monroe, Middle St. Johns River & Smith Canal BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
221,868	26,060	8,482	17,578	5,527	11,335

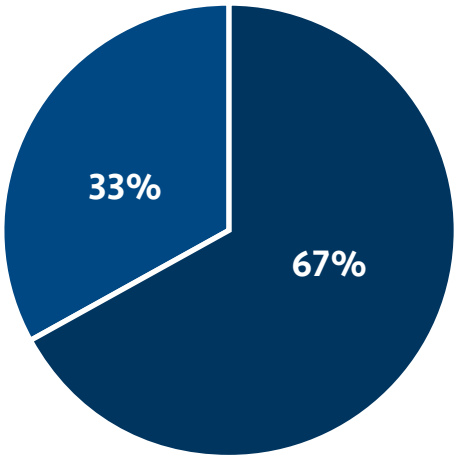
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	26,060	33%
Total agricultural acres enrolled	8,482	
Total irrigated acres	1,647	19%
Total irrigated acres enrolled	321	
Number of NOIs within BMAP	31	
Completed IV site visits	7	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	32	18
1 - 25	523	3,610
25 - < 50	27	934
50 - < 250	39	3,654
≥ 250	7	3,119
TOTAL	628	11,335

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	185
Cow/Calf	7,987
Equine	7
Multiple Commodities	3
Nursery	297
Row/Field Crop	3
TOTAL	8,482

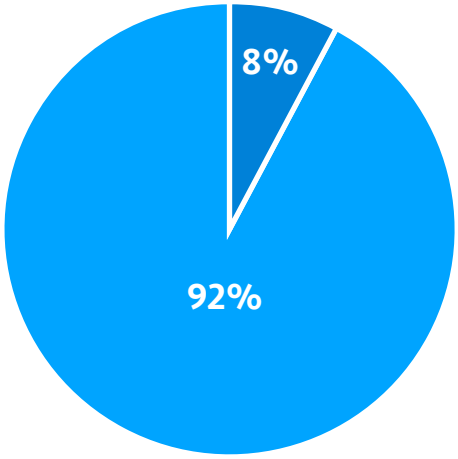
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

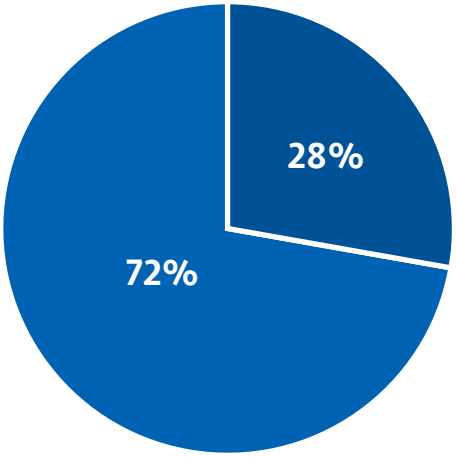
Lake Jesup BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
87,821	7,987	5,728	2,259	1,190	907

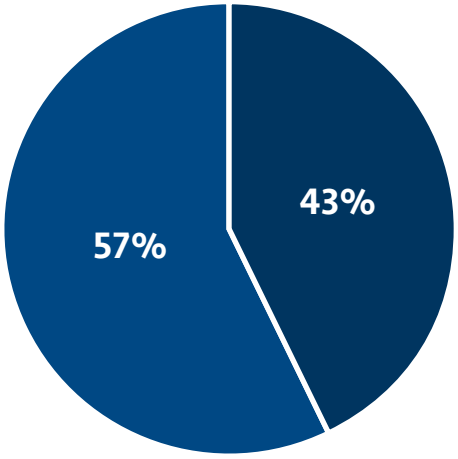
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	7,987	72%
Total agricultural acres enrolled	5,728	
Total irrigated acres	1,219	77%
Total irrigated acres enrolled	933	
Number of NOIs within BMAP	45	
Completed IV site visits	3	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	23	13
1 - 25	129	714
25 - < 50	4	126
50 - < 250	1	55
TOTAL	157	907

Agricultural Acres Enrolled

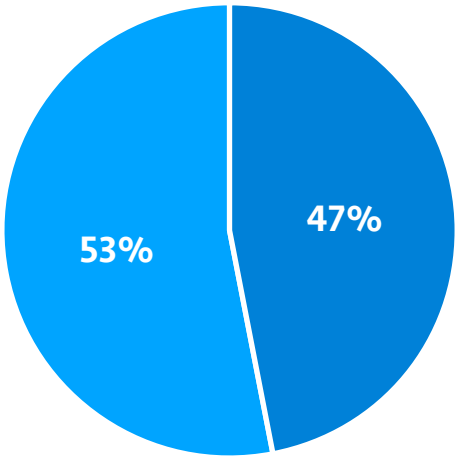
BMP Manuals	Acres
Citrus	200
Cow/Calf	3,133
Equine	17
Multiple Commodities	1,447
Nursery	694
Row/Field Crop	28
Sod	209
TOTAL	5,728

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

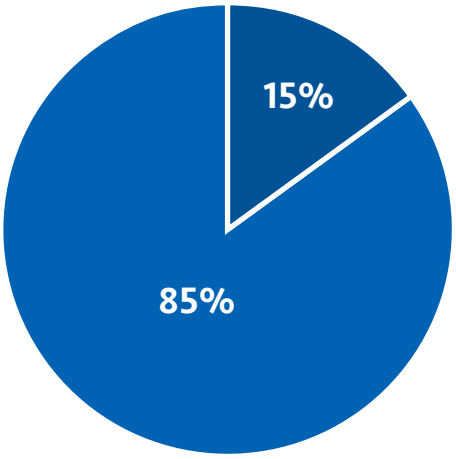
Status of Implementation of Agricultural Best Management Practices (BMPs)
Lake Okeechobee BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
2,063,396	1,834,800	1,561,494	273,306	44,818	55,054

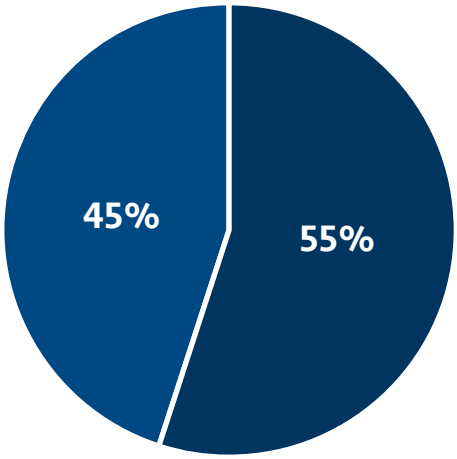
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	1,834,800	85%
Total agricultural acres enrolled	1,561,494	
Total irrigated acres	666,699	94%
Total irrigated acres enrolled	626,503	
Number of NOIs within BMAP	2,489	
Completed IV site visits	1,271	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	160	91
1 - 25	1,341	12,199
25 - < 50	171	6,113
50 - < 250	184	19,912
≥ 250	40	16,738
TOTAL	1,896	55,054

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	109,967
Conservation Plan	160,185
Cow/Calf	526,398
Dairy	1,382
Equine	428
Fruit/Nut	874
LOPP	2,473
Multiple Commodities	340,044
Nursery	3,429
Poultry	135
Row/Field Crop	402,613
Sod	13,566
TOTAL	1,561,494

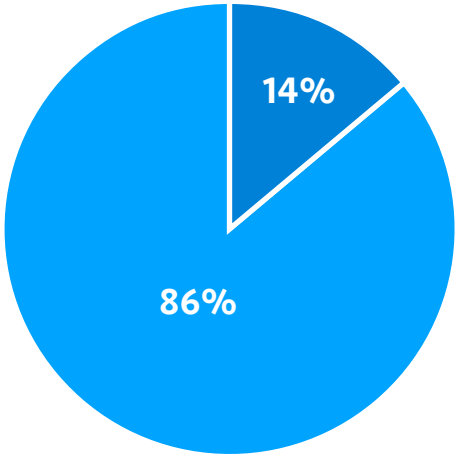
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

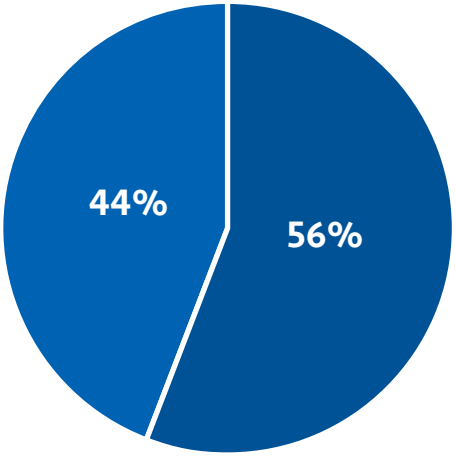
Long Branch BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
2,744	524	230	294	126	167

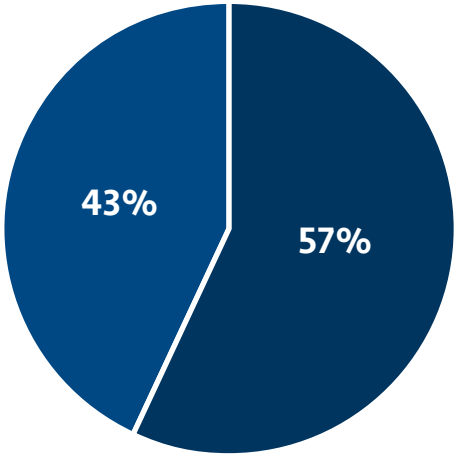
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	524	44%
Total agricultural acres enrolled	230	
Total irrigated acres	0	0%
Total irrigated acres enrolled	0	
Number of NOIs within BMAP	1	
Completed IV site visits	1	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	1	1
1 - 25	11	104
25 - < 50	1	62
TOTAL	13	167

Agricultural Acres Enrolled

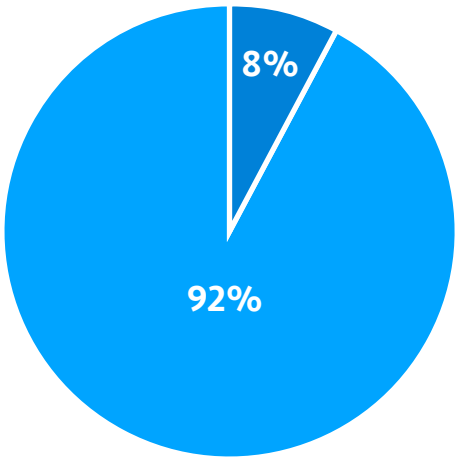
BMP Manuals	Acres
Cow/Calf	230
TOTAL	230

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

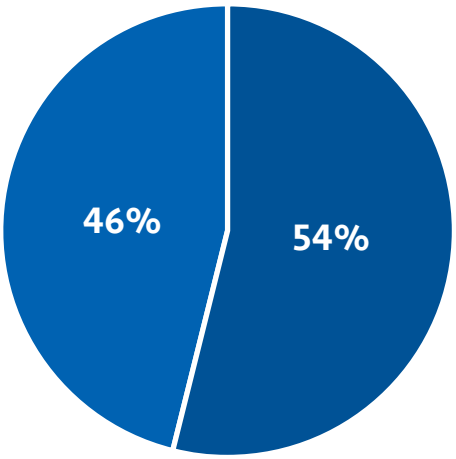
Status of Implementation of Agricultural Best Management Practices (BMPs)
Lower St. Johns Mainstem BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
1,656,4400	150,961	69,665	81,296	37,647	41,839

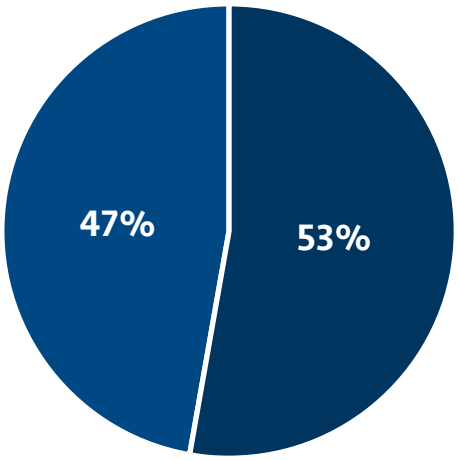
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	150,961	46%
Total agricultural acres enrolled	69,665	
Total irrigated acres	44,157	72%
Total irrigated acres enrolled	31,583	
Number of NOIs within BMAP	294	
Completed IV site visits	117	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	102	27
1 - 25	1,703	14,673
25 - < 50	238	8,282
50 - < 250	154	14,437
≥ 250	7	4,389
TOTAL	2,204	41,839

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	99
Cow/Calf	29,700
Equine	74
Fruit & Nut	291
Multiple Commodities	8,295
Nursery	2,620
Row/Field Crops	25,817
Sod	2,769
TOTAL	69,665

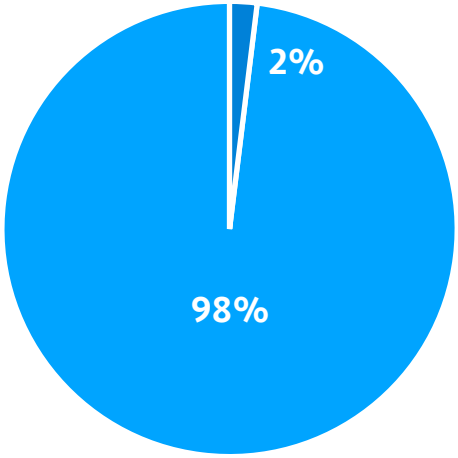
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

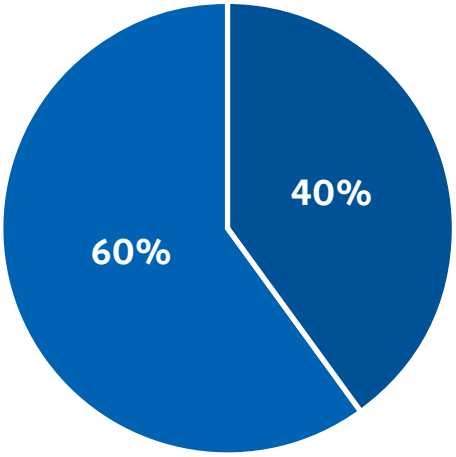
Lower St. Johns River Basin Tributaries I and II BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
66,101	1,179	713	466	354	115

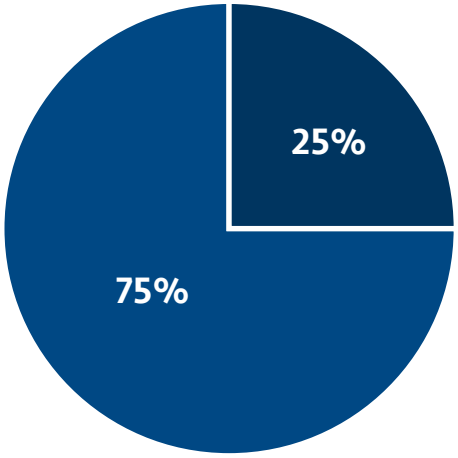
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	1,179	60%
Total agricultural acres enrolled	713	
Total irrigated acres	1	0%
Total irrigated acres enrolled	0	
Number of NOIs within BMAP	3	
Completed IV site visits	1	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	2	2
1 - 25	16	77
25 - < 50	1	37
TOTAL	19	115

Agricultural Acres Enrolled

BMP Manuals	Acres
Cow/Calf	363
Multiple Commodities	313
Row/Field Crops	37
TOTAL	713

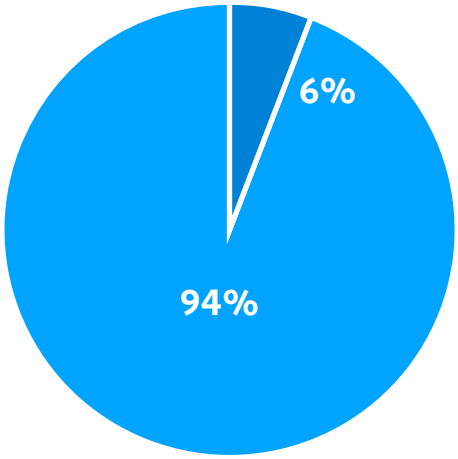
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

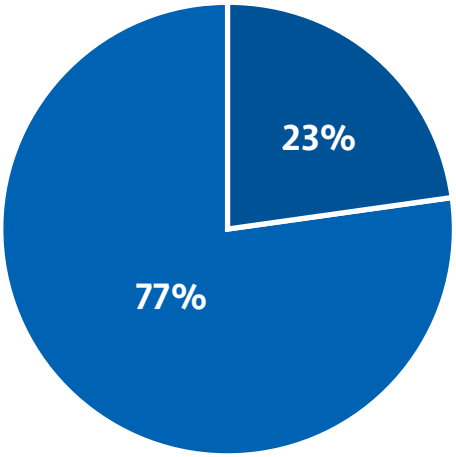
Manatee River BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
15,030	998	764	234	124	110

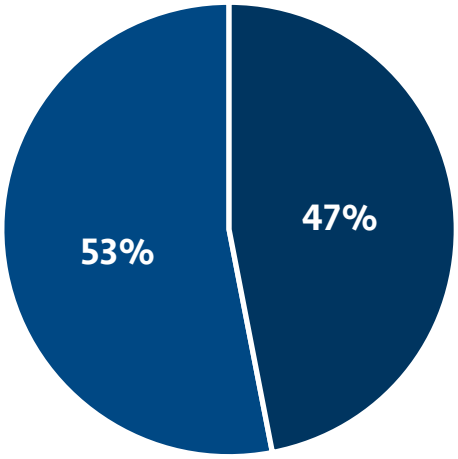
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	998	77%
Total agricultural acres enrolled	764	
Total irrigated acres	569	94%
Total irrigated acres enrolled	533	
Number of NOIs within BMAP	3	
Completed IV site visits	1	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	9	69
1 - 25	1	41
TOTAL	10	110

Agricultural Acres Enrolled

BMP Manuals	Acres
Cow/Calf	300
Multiple Commodities	349
Row/Field Crops	115
TOTAL	764

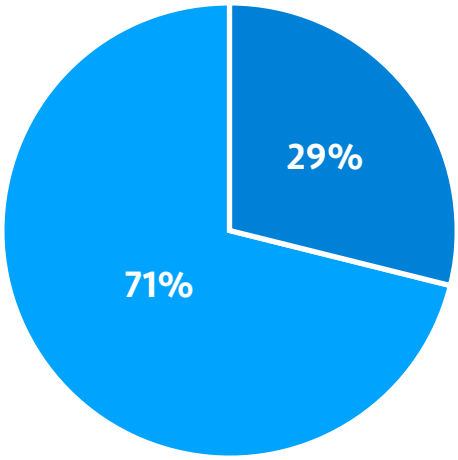
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

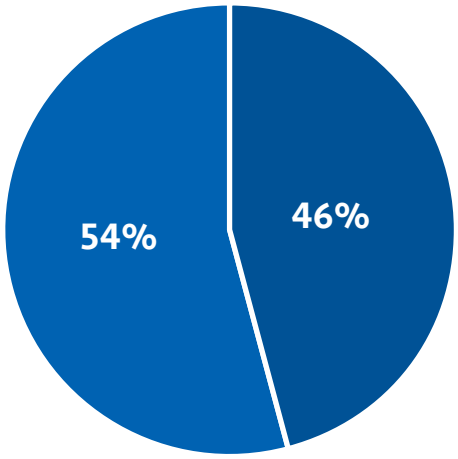
Middle and Lower Suwannee River BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
958,729	386,126	208,665	177,461	54,676	121,868

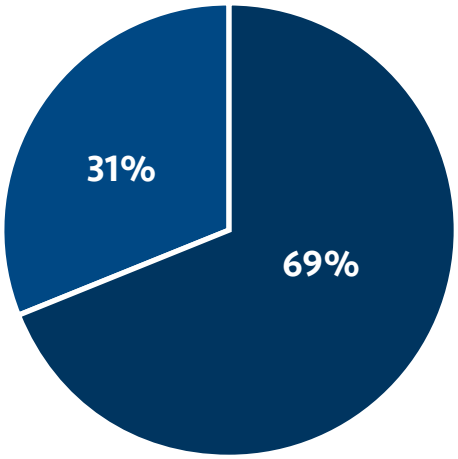
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	386,126	54%
Total agricultural acres enrolled	208,665	
Total irrigated acres	112,623	82%
Total irrigated acres enrolled	92,619	
Number of NOIs within BMAP	1,326	
Completed IV site visits	578	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	51	35
1 - 25	3,382	36,096
25 - < 50	868	30,357
50 - < 250	523	45,962
≥ 250	24	9,418
TOTAL	4,848	121,868

Agricultural Acres Enrolled

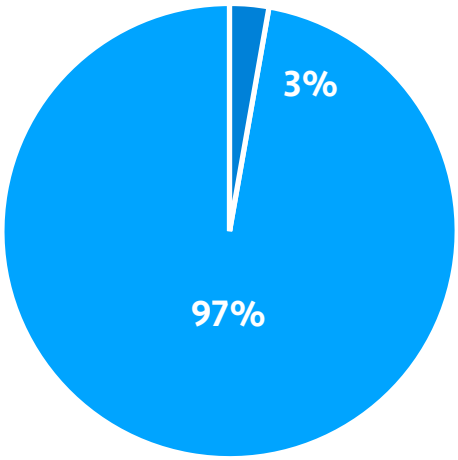
BMP Manuals	Acres
Cow/Calf	30,000
Dairy	6,216
Equine	36
Fruit & Nut	573
Multiple Commodities	81,275
Nursery	438
Poultry	261
Row/Field Crops	89,657
Sod	209
TOTAL	208,665

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

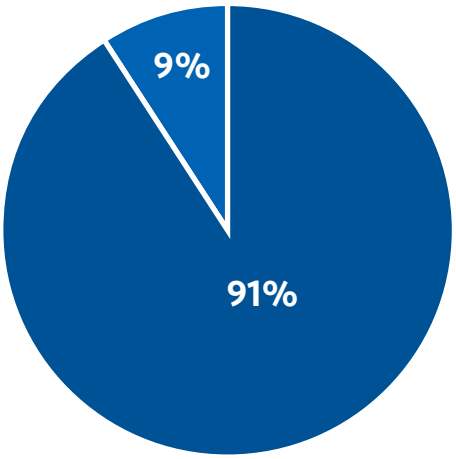
Status of Implementation of Agricultural Best Management Practices (BMPs)
North Indian River Lagoon BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
210,403	6,687	626	6,061	2,725	3,332

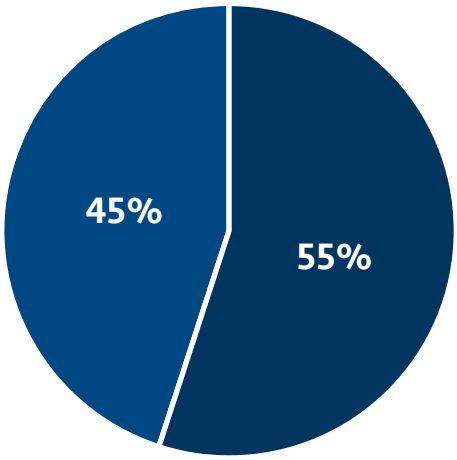
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	6,687	9%
Total agricultural acres enrolled	626	
Total irrigated acres	892	28%
Total irrigated acres enrolled	250	
Number of NOIs within BMAP	18	
Completed IV site visits	3	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	19	12
1 - 25	232	1,614
25 - < 50	28	922
50 - < 250	10	785
TOTAL	289	3,332

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	470
Cow/Calf	113
Fruit & Nut	34
Nursery	9
TOTAL	626

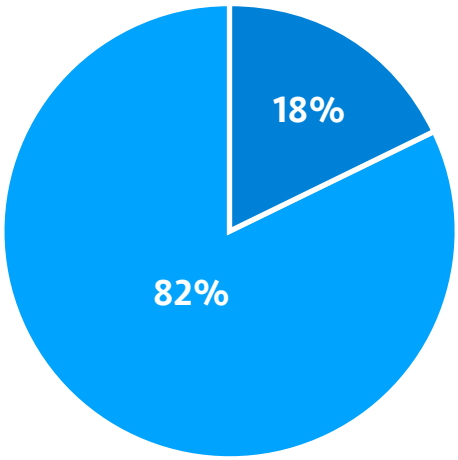
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

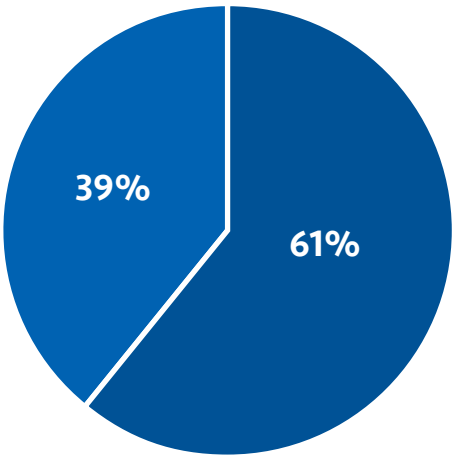
Orange Creek BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
316,768	68,503	26,665	41,838	12,922	26,274

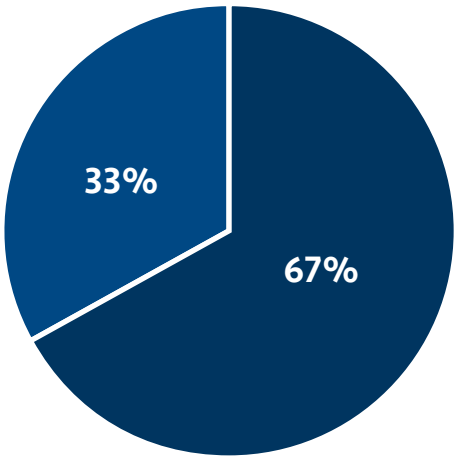
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	68,503	39%
Total agricultural acres enrolled	26,665	
Total irrigated acres	3,712	72%
Total irrigated acres enrolled	2,684	
Number of NOIs within BMAP	210	
Completed IV site visits	49	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	28	18
1 - 25	998	9,557
25 - < 50	134	4,596
50 - < 250	88	8,175
≥ 250	11	3,927
TOTAL	1,259	26,274

Agricultural Acres Enrolled

BMP Manuals	Acres
Cow/Calf	14,960
Dairy	79
Equine	2,424
Fruit & Nut	992
Multiple Commodities	4,686
Nursery	46
Row/Field Crop	26,665

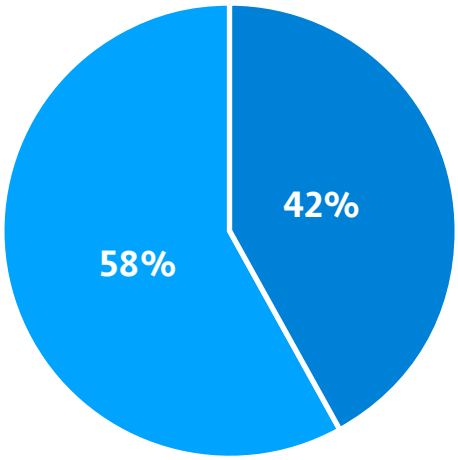
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

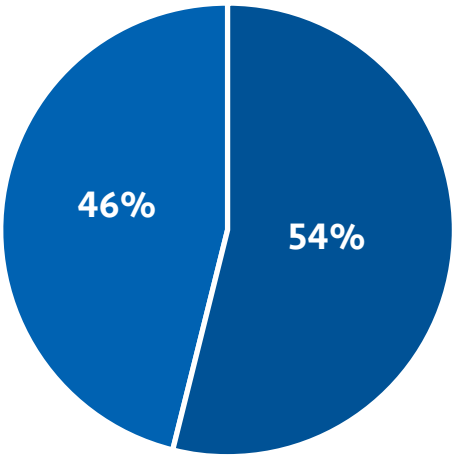
Rainbow Springs and River BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
253,450	181,354	82,959	98,395	17,146	80,211

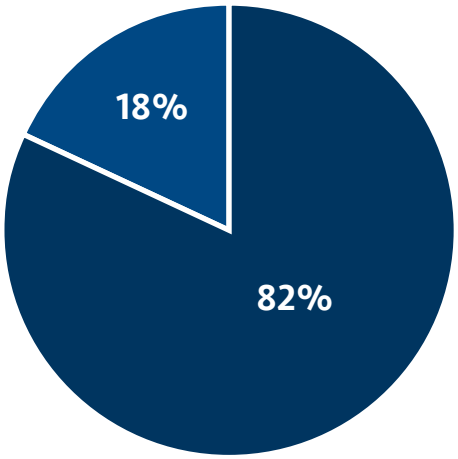
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	181,354	46%
Total agricultural acres enrolled	82,959	
Total irrigated acres	15,951	88%
Total irrigated acres enrolled	14,087	
Number of NOIs within BMAP	486	
Completed IV site visits	194	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	32	20
1 - 25	2,350	25,675
25 - < 50	495	17,013
50 - < 250	233	21,362
≥ 250	26	16,141
TOTAL	3,136	80,211

Agricultural Acres Enrolled

BMP Manuals	Acres
Cow/Calf	26,445
Equine	13,370
Fruit & Nut	22
Multiple Commodities	35,779
Nursery	732
Row/Field Crop	6,591
Sod	20
TOTAL	82,959

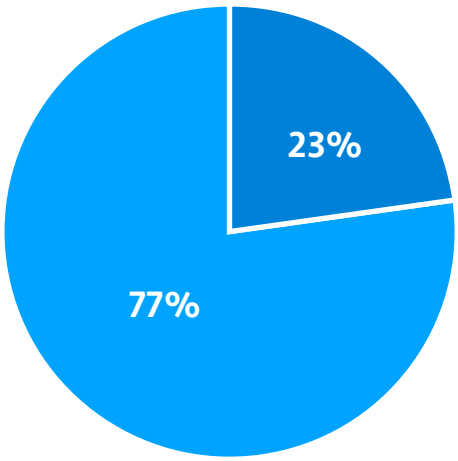
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

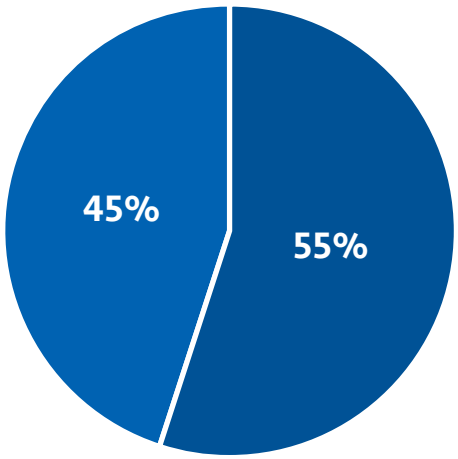
Santa Fe River BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
830,494	246,163	111,056	135,107	42,446	88,567

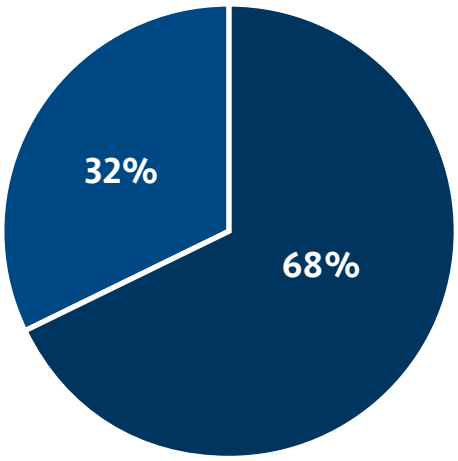
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	246,163	45%
Total agricultural acres enrolled	111,056	
Total irrigated acres	21,880	82%
Total irrigated acres enrolled	18,027	
Number of NOIs within BMAP	784	
Completed IV site visits	317	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	150	86
1 - 25	4,485	38,620
25 - < 50	612	21,301
50 - < 250	310	26,511
≥ 250	6	2,049
TOTAL	5,563	88,567

Agricultural Acres Enrolled

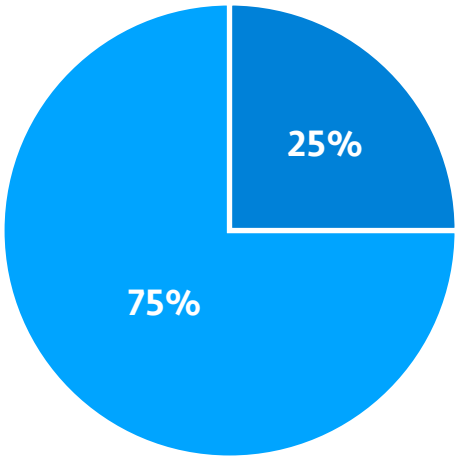
BMP Manuals	Acres
Citrus	3
Cow/Calf	36,404
Dairy	886
Equine	33
Fruit & Nut	286
Multiple Commodities	44,251
Nursery	684
Poultry	96
Row/Field Crop	28,199
Sod	214
TOTAL	111,056

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

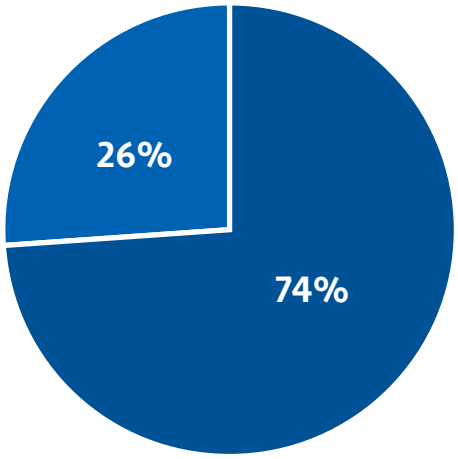
Status of Implementation of Agricultural Best Management Practices (BMPs)
Silver River and Springs BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
476,654	156,155	41,270	114,885	30,125	81,364

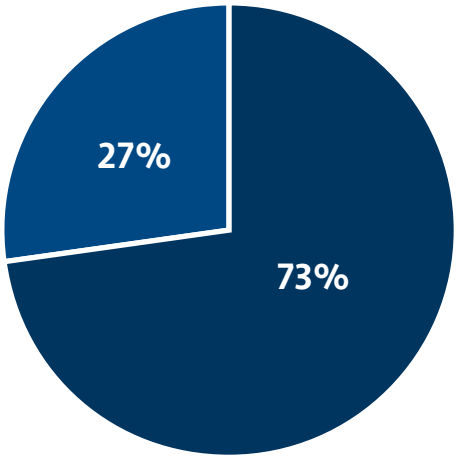
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	156,155	26%
Total agricultural acres enrolled	41,270	
Total irrigated acres	8,100	50%
Total irrigated acres enrolled	4,063	
Number of NOIs within BMAP	379	
Completed IV site visits	98	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	149	90
1 - 25	3,705	32,580
25 - < 50	378	13,220
50 - < 250	249	23,023
≥ 250	28	12,451
TOTAL	4,509	81,364

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	522
Cow/Calf	23,010
Dairy	79
Equine	4,178
Fruit & Nut	879
Multiple Commodities	6,439
Nursery	255
Row/Field Crop	5,869
Sod	39
TOTAL	41,270

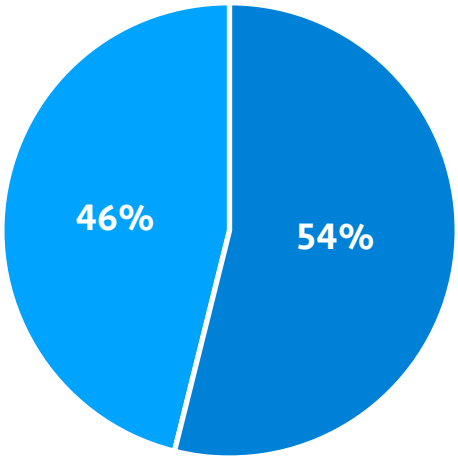
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

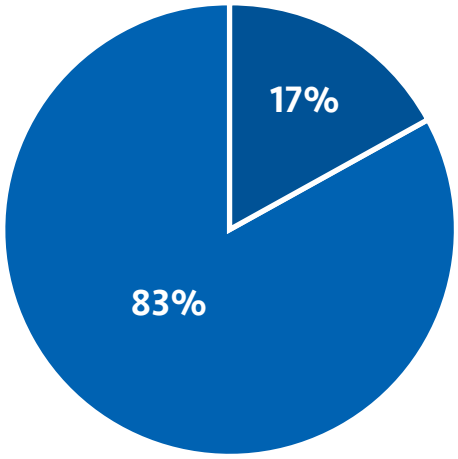
St. Lucie River and Estuary BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
247,809	291,935	243,463	48,472	11,032	24,634

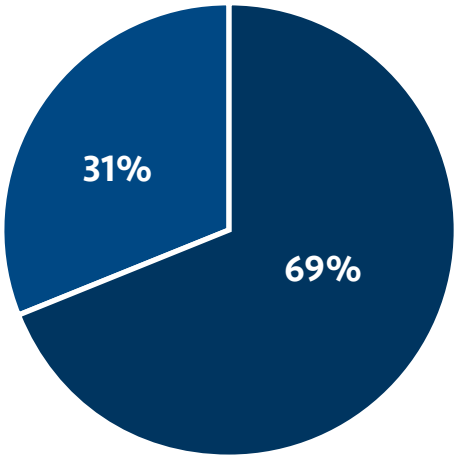
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	291,935	83%
Total agricultural acres enrolled	243,463	
Total irrigated acres	64,321	91%
Total irrigated acres enrolled	58,568	
Number of NOIs within BMAP	535	
Completed IV site visits	259	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	16	9
1 - 25	721	7,748
25 - < 50	105	3,628
50 - < 250	70	6,673
≥ 250	13	6,575
TOTAL	925	24,634

Agricultural Acres Enrolled

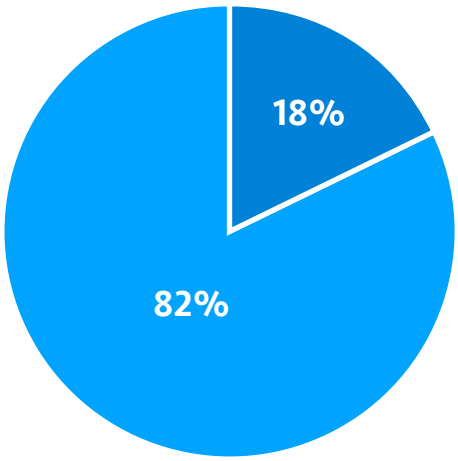
BMP Manuals	Acres
Citrus	10,963
Cow/Calf	134,222
Dairy	617
Equine	678
Fruit & Nut	186
LOPP	3
Multiple Commodities	74,148
Nursery	656
Poultry	42
Row/Field Crop	15,607
Sod	929
Wildlife	5,412
TOTAL	243,463

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

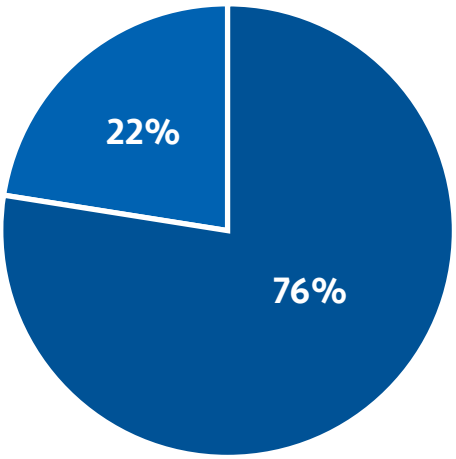
Status of Implementation of Agricultural Best Management Practices (BMPs)
Upper Ocklawaha River BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
461,907	100,094	21,668	78,426	32,661	41,069

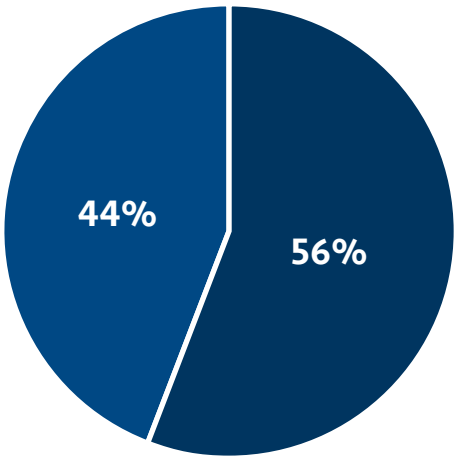
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	100,094	22%
Total agricultural acres enrolled	21,668	
Total irrigated acres	14,270	53%
Total irrigated acres enrolled	7,493	
Number of NOIs within BMAP	293	
Completed IV site visits	67	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	123	69
1 - 25	1,866	15,286
25 - < 50	234	8,213
50 - < 250	169	15,276
≥ 250	6	2,224
TOTAL	2,398	41,069

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	4,910
Cow/Calf	10,179
Equine	165
Fruit & Nut	885
Multiple Commodities	2,366
Nursery	2,056
Row/Field Crop	783
Sod	324
TOTAL	21,668

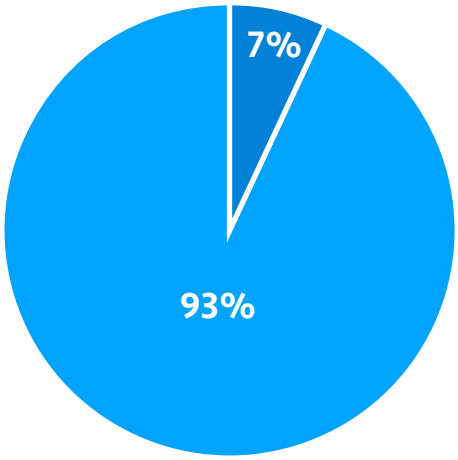
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

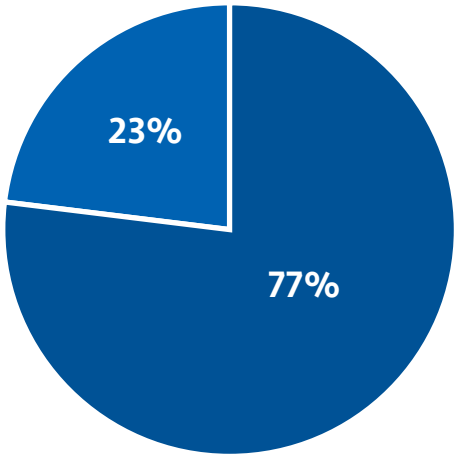
Upper Wakulla River and Wakulla Spring BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
787,765	60,723	13,691	46,762	22,022	23,865

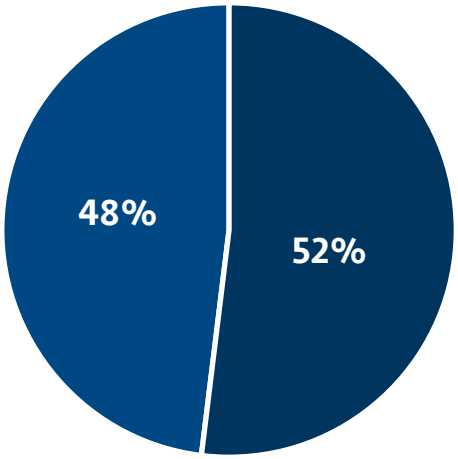
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	60,723	23%
Total agricultural acres enrolled	13,961	
Total irrigated acres	4,964	44%
Total irrigated acres enrolled	2,207	
Number of NOIs within BMAP	103	
Completed IV site visits	15	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	18	14
1 - 25	956	8,307
25 - < 50	123	4,198
50 - < 250	72	6,476
≥ 250	9	4,870
TOTAL	1,178	23,865

Agricultural Acres Enrolled

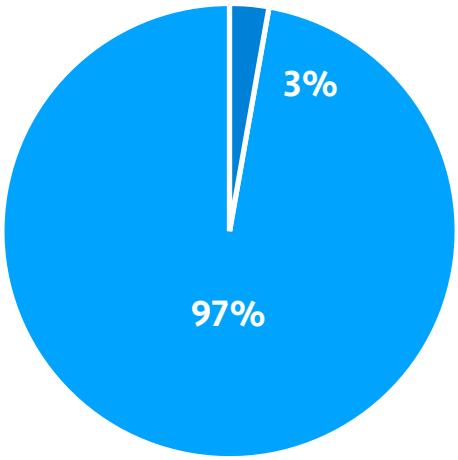
BMP Manuals	Acres
Citrus	87
Cow/Calf	4,598
Equine	5
Fruit & Nut	1,282
Multiple Commodities	2,103
Nursery	1,090
Row/Field Crop	4,345
Sod	451
TOTAL	13,961

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

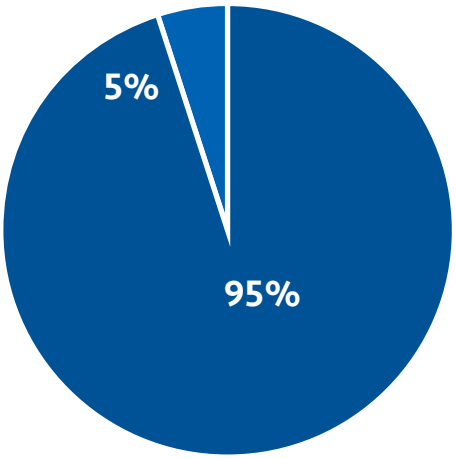
Status of Implementation of Agricultural Best Management Practices (BMPs)
Volusia Blue Spring BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
66,669	2,378	119	2,259	997	1,249

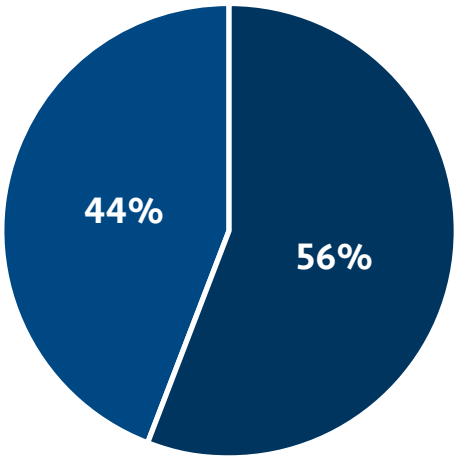
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	2,378	5%
Total agricultural acres enrolled	119	
Total irrigated acres	103	24%
Total irrigated acres enrolled	25	
Number of NOIs within BMAP	9	
Completed IV site visits	3	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	2	2
1 - 25	147	920
25 - < 50	6	181
50 - < 250	2	147
TOTAL	157	1,249

Agricultural Acres Enrolled

BMP Manuals	Acres
Cow/Calf	84
Multiple Commodities	11
Nursery	24
TOTAL	119

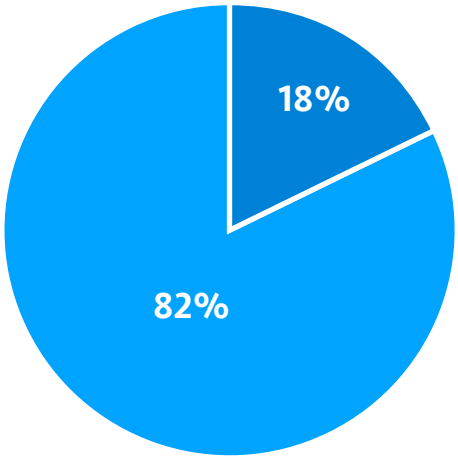
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

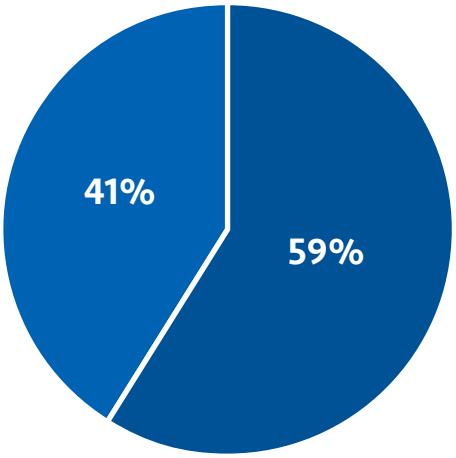
Wacissa River and Wacissa Spring Group BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
267,031	60,555	24,965	35,590	12,034	23,527

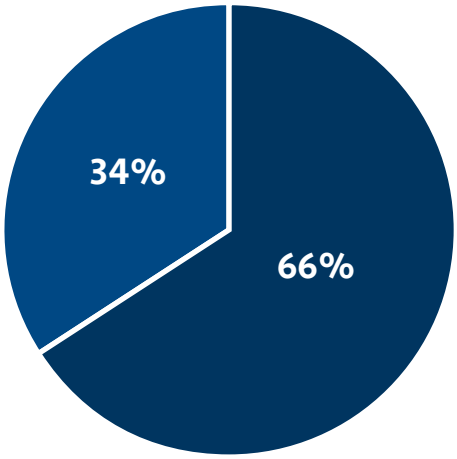
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	60,555	41%
Total agricultural acres enrolled	24,965	
Total irrigated acres	3,664	89%
Total irrigated acres enrolled	3,277	
Number of NOIs within BMAP	102	
Completed IV site visits	39	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	35	23
1 - 25	800	6,851
25 - < 50	135	4,699
50 - < 250	94	9,186
≥ 250	8	2,769
TOTAL	1,072	23,527

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	97
Cow/Calf	6,495
Dairy	1,258
Multiple Commodities	7,253
Nursery	529
Row/Field Crop	9,333
TOTAL	24,965

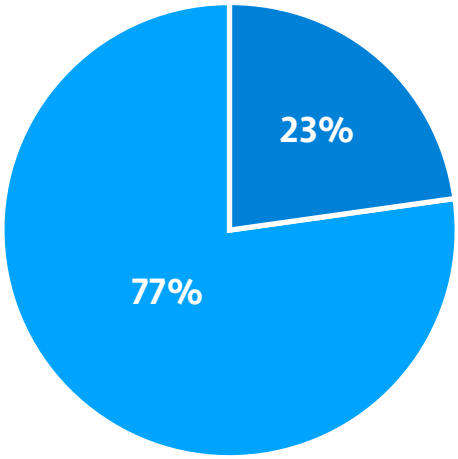
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

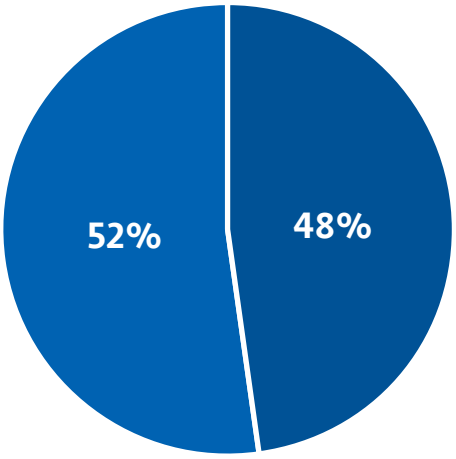
Weeki Wachee Spring and River BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
165,468	48,305	25,001	23,304	5,498	17,517

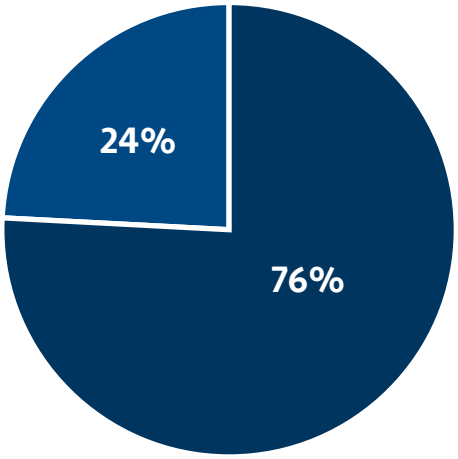
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	48,305	52%
Total agricultural acres enrolled	25,001	
Total irrigated acres	1,243	57%
Total irrigated acres enrolled	706	
Number of NOIs within BMAP	85	
Completed IV site visits	24	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	13	9
1 - 25	607	5,916
25 - < 50	93	3,186
50 - < 250	63	6,321
≥ 250	5	2,084
TOTAL	781	17,517

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	122
Cow/Calf	18,445
Equine	17
Fruit & Nut	918
Multiple Commodities	2,864
Nursery	144
Row/Field Crop	516
Wildlife	1,975
TOTAL	25,001

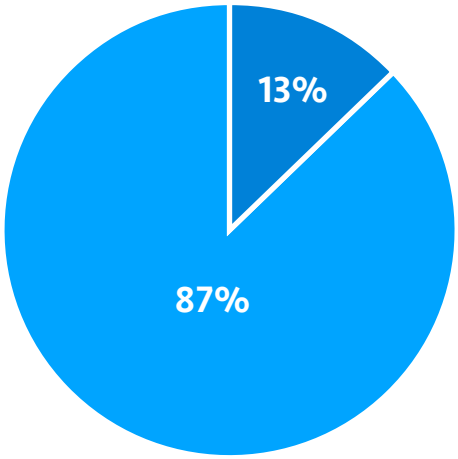
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

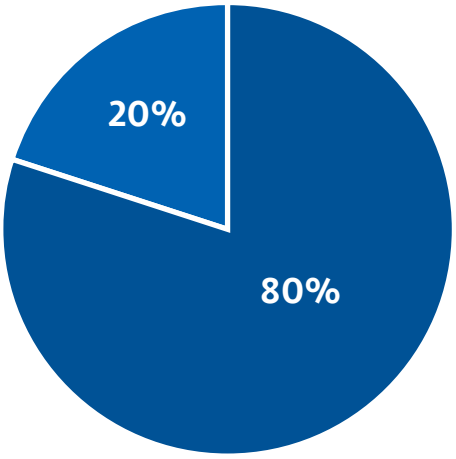
Wekiva River, Rock Springs Run, and Little Wekiva Canal BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
341,100	50,293	10,202	40,091	16,627	19,084

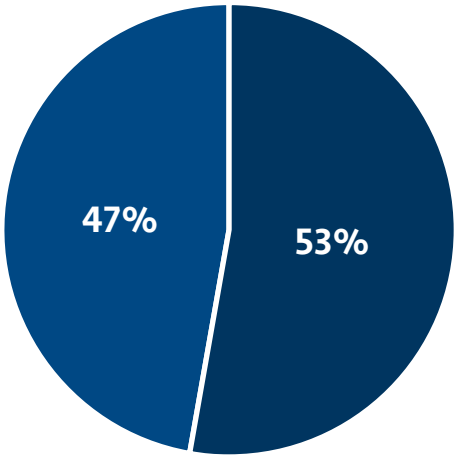
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	50,293	20%
Total agricultural acres enrolled	10,202	
Total irrigated acres	6,404	60%
Total irrigated acres enrolled	3,842	
Number of NOIs within BMAP	257	
Completed IV site visits	71	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	40	25
1 - 25	891	7,173
25 - < 50	119	4,117
50 - < 250	72	6,235
≥ 250	5	1,534
TOTAL	1,127	19,084

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	1,475
Cow/Calf	3,353
Equine	515
Fruit & Nut	363
Multiple Commodities	1,215
Nursery	2,234
Row/Field Crop	723
Sod	324
TOTAL	10,202

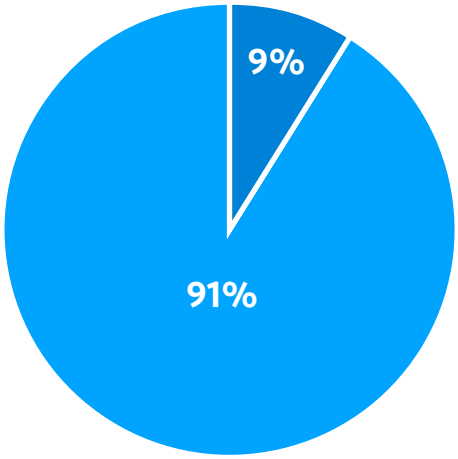
* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Status of Implementation of Agricultural Best Management Practices (BMPs)

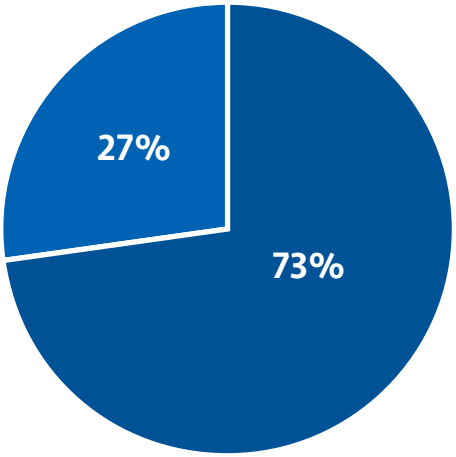
Wekiwa Spring and Rock Springs BMAP

Non-Agricultural Acres	Agricultural Acres	Enrolled Agricultural Acres	Remaining Agricultural Acres*	Unlikely Enrollable Acres	Potentially Enrollable Acres
174,277	18,007	4,778	13,229	7,148	4,955

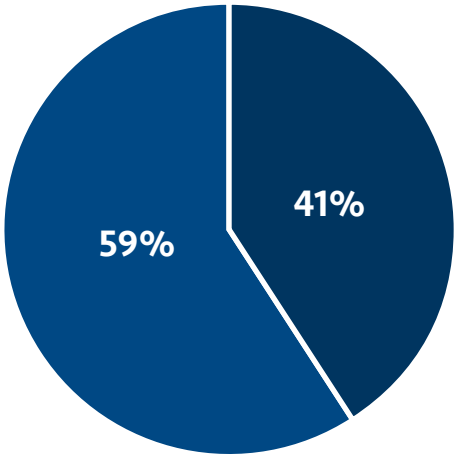
Non-Ag Acres vs. Ag Acres



Enrolled Ag Acres vs. Remaining Ag Acres



Unlikely Enrollable Acres vs. Potentially Enrollable Acres



Enrollment and IV Site Summary	2021	2021 Percent Enrolled
Total agricultural acres in the BMAP	18,007	27%
Total agricultural acres enrolled	4,778	
Total irrigated acres	4,121	64%
Total irrigated acres enrolled	2,617	
Number of NOIs within BMAP	156	
Completed IV site visits	48	

Potentially Enrollable Parcel Distribution by Agricultural Acreage

Agricultural Acres Within Parcel	Number of Parcels	Total Agricultural Acres
< 1	40	25
1 - 25	891	7,173
25 - < 50	119	4,117
50 - < 250	72	6,235
≥ 250	5	1,534
TOTAL	1,127	19,084

Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	1,091
Cow/Calf	463
Equine	36
Fruit & Nut	218
Multiple Commodities	896
Nursery	1,224
Row/Field Crop	547
Sod	303
TOTAL	4,778

* This value includes acreages within state-owned properties and/or surface water project areas that are not included in the 'unlikely enrollable' or 'potentially enrollable' acres categories

Appendix II: Data

The BMP Implementation Verification site visit data used in this report was collected between January 1 and December 31, 2021. The data range and reporting align with the FDEP Statewide Annual Report on Total Maximum Daily Loads, Basin Management Action Plans, Minimum Flows or Minimum Water Levels, and Recovery or Prevention Strategies Report (STAR Report), and some data generated for this report has been provided to FDEP for inclusion in the STAR Report prior to reporting here. Aligning these timeframes ensures consistency between FDACS and FDEP reporting and provides an opportunity for collaboration between agencies.

In addition to information collected during IV site visits, data sources used in this report include Geographic Information System (GIS) mapping data, WMD data, and county property appraiser parcel data. OAWP continuously works to ensure that the data used for reporting is based on an accurate and consistent statewide dataset, and that standard operating procedures for data entry and analyses are followed.

FSAID

The agricultural areas identified in this report are based on the Florida Statewide Agricultural Irrigation Demand (FSAID) datasets. Information on FSAID is available at https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Water-Supply-Planning. This annual report is based on FSAID8. Statewide agricultural acreage and enrolled agricultural acreage vary year to year due to the dynamic nature of the agricultural industry. Ground-truthing efforts are essential for ensuring accuracy when determining the land use types and amount of overall agricultural acreage in the state, which then becomes the denominator for many analyses in this report. FDACS continues to ground-truth and refine the FSAID datasets to ensure accurate identification of agricultural lands in Florida and to spot trends in agricultural land uses and intensities over time. FSAID agricultural land use datasets are updated annually through a combination of methods including consumptive water use permit review, Department of Revenue land use comparison, and ground-truthing. Ground-truthing of the irrigated agricultural lands is undertaken each year in specific counties, which are rotated throughout the state on a five-year cycle. FDACS provides updated datasets to FDEP and the water management districts each year. Work is ongoing with these coordinating agencies to incorporate the FSAID agricultural data into the statewide land use dataset. The water management districts currently use the FSAID agricultural acres for water supply planning, though some perform their own volume calculations. FDEP BMAPs (including reports and BMAP updates) have different agricultural land use acres and calculations because these reports were adopted up to 14 years ago. Further, some of the more recently adopted BMAPs and models continue to use older datasets, so the agricultural acres identified in the BMAPs may not match the current agricultural acres that FDACS uses for analyses and BMP enrollment efforts.

BMP Program Enrollment Data

Each enrolled parcel ID is recorded on the NOI form as a condition of enrollment. Data from each completed and signed NOI and BMP checklist, including the parcel IDs, is entered into the Best Management Practices Tracking System database (BMPTS2). On a monthly basis, the BMPTS2 enrolled parcel data is mapped using the DOR annual statewide GIS parcel data. The mapped enrolled parcel data is used to identify overall BMP enrollment statewide and within adopted BMAP areas, which are also compared to the latest FSAID agricultural land use data. [14]

Limitations of Enrollment Data

FSAID Data Limitations
Constant fluctuations in agricultural land use make it difficult to compare previous year data to current year data. Consequently, an agricultural acreage comparison to last year's report is not provided in this report. The FSAID8 report that was released in June 2021 does, however, address the amount of agricultural land use change that occurred in 2021 compared to 2020.

Parcel Data Limitations
Parcel IDs and parcel geometry change every year and introduce issues when trying to map NOIs. FDACS staff uses the most up-to-date parcel information available on the relevant county property appraiser website to enroll new landowners or producers in the BMP Program and to verify details about the parcels that are currently enrolled (e.g., owner information, parcel number, parcel acreage, etc.). Parcel information available on a county property appraiser's website does not include GIS data for mapping purposes. Enrollments are mapped spatially using parcel data from each county that is submitted to the Florida Department of Revenue (FDOR) and compiled in GIS once per year by FDACS GIS staff. Therefore, information contained in this dataset may be outdated compared to information on the 67 property appraisers' websites during the time of enrollment.

Market Fluctuations
The dynamic nature of Florida's agricultural industry creates some challenges with comparing agricultural acres and BMP Program enrollment numbers from year to year. For example, the number of NOIs and the number of acres enrolled in the BMP Program fluctuate when parcels are sold, leases are terminated, production areas decrease, or production ceases. When crop types or commodities on a specific parcel change, additional NOIs may be required if the crop or commodity falls under a different BMP manual. New commodities may also result in a reduction or increase in the acreage enrolled in the BMP Program.

Data Management

OAWP continues to analyze staff workload and areas where efficiencies can be gained. In 2021, staff began the process of consolidating multiple NOIs for individual landowners or producers within a county, and reassigning NOIs to optimize travel time so that IV sites are accessible within a 40 to 60-minute drive-time. The practice of completing multiple NOIs for operations located in more than one county was also discontinued to reduce paperwork and improve data tracking.

14. Acres are rounded for reporting purposes. GIS boundary data for BMAP areas is provided by FDEP.

OAWP continues to correct mapping issues that have presented challenges to the office over the years. Environmental Systems Research Institute, a leader in the Geographic Information Systems (GIS) field, was brought in to assist OAWP with its mapping issues. Instead of mapping enrolled parcels each month after NOIs are entered into the database, a workflow is being tested that would allow mapping of NOIs as they are entered into the database or adding/removing parcels on current NOIs as a result of IV site visits. This will ensure that the NOI boundary and parcel(s) geometry are correct at the time of enrollment or updated at least within two years of enrollment. Once all NOIs are reviewed and verified, this mapped enrollment coverage will become static and will only be edited if changes are required. As a result, the necessity to re-map on a monthly basis to keep up with parcel changes throughout the year will no longer be required. As new DOR parcel datasets become available, the static enrolled coverage will be compared to the new DOR parcel dataset to determine how the parcel IDs and geometries have changed over the year.

Appendix III: Land Use Characterization

Unenrolled Agricultural Lands Characterization

Overview:
In an FDEP-adopted BMAP, agricultural landowners are required to either enroll in the appropriate FDACS BMP Program and implement applicable BMPs or conduct water quality monitoring prescribed by FDEP or a water management district (WMD). FDACS endeavors to get 100 percent of the enrollable agricultural acres into the appropriate BMP Program by evaluating statewide agricultural land use data using parcel level datasets containing owner information, addresses, and other details at a more granular scale.

Examining statewide agricultural lands at the parcel level provides insight into the challenge of meeting the 100 percent enrollment goal. FDACS identifies parcels that are unlikely to have agricultural activity, either via aerial review, or by classifications within the data, such as parcels that do not have an agricultural tax valuation. In addition, FDACS identifies parcels that require further evaluation, such as those that have agricultural activity intended solely for personal use ancillary to a residence, those that do not have an agricultural land use as determined by the property appraiser, as well as parcels where there is no current activity to enroll.

To monitor progress and allocate staff resources, FDACS analyzes unenrolled agricultural lands annually for all BMAPs and the results are summarized in FDACS's report to the legislature on statewide BMP implementation. Results of these analyses inform staffing and budget requests as well as FDACS's discussions related to inactive operations, urban agriculture, rural homesteads, fallow agricultural lands and more. An unenrolled agricultural land analysis is also performed when FDEP is developing a new BMAP or updating an existing BMAP, and a summary is included in the BMAP's Agriculture Appendix. Beyond including a summary of the characterization, future BMAP iterations should utilize the analysis results to supplement decisions made when modeling land use, allocations, and load estimations. FDACS understands that during the development of BMAP allocations any change in allocations should be made in coordination with FDEP and BMAP stakeholders at the time of BMAP updates. However, as FDACS performs this analysis on an annual basis, FDACS will present the unenrolled agricultural lands characterizations at BMAP stakeholder meetings and provide spatial coverages to FDEP for consideration as part of future BMAP updates.

This Appendix describes how FDACS executes the unenrolled agricultural lands characterization, explains why the ability to implement agricultural BMPs under the OAWP BMP Program is limited or not possible for some of the lands, and provides recommendations for how these lands should be considered by FDEP within BMAPs.

Method:
The unenrolled agricultural lands are characterized at the parcel level using geographic information systems (GIS) software by overlaying FDEP's FL-SOLARIS database, WMD surface water restoration projects (if any), and the latest FL DOR Property Appraiser parcel data with the unenrolled agricultural lands. Based on the location of the unenrolled agricultural lands within these datasets, and using information such as aerials, property appraiser use codes, land

use descriptions, agricultural tax valuations, and owner names, FDACS determines if there is agricultural activity and if a parcel is enrollable within the purview of an existing BMP manual. Parcel characterization can be grouped into 4 main bins suggested by DEP: forestry/aquaculture, not agricultural land, not currently enrollable, and enrollable agricultural lands. The next section provides details regarding the FDACS characterization categories and DEP bins. **Table 7** provides a summary of the categories and bins.

Bins:

Timberland (Forestry) /Aquaculture

Unenrolled agricultural lands located within parcels that have a land use designation of Aquaculture or Timberland may be agriculture but require further review by FDACS to determine whether the agricultural activity is enrollable in either FDACS's Aquaculture, Forestry, or an OAWP BMP Program.

In the 2020 South Florida BMAPs (Caloosahatchee, Lake Okeechobee, and St. Lucie) and 2021 Indian River Lagoon BMAPs, aquaculture loads and acreages were recognized to be not enrollable in OAWP BMPs. To identify parcels associated with aquaculture, FDACS utilized their agriculture statewide coverage and a list of active aquaculture facilities provided by the Division of Aquaculture which includes facility names, type, and coordinates. The BMAP reports included a section that summarized number of sites, the associated acreages, and where stakeholders may obtain more information regarding aquaculture activity in the watersheds.

Similar narrative should be included for agricultural acreages and loads deemed enrollable in Forestry BMPs in upcoming BMAPs. To help identify parcels associated with Forestry, FDACS utilizes the property appraiser data and selects those parcels where the land use description or aerial review indicates Timberland. The BMAP reports can include a section that summarizes number of parcels, the associated acreages, and where stakeholders may obtain more information regarding the FDACS Forestry division and forestry BMPs.

Not Agriculture

Unenrolled agricultural lands located within parcels that meet the criteria listed below should not be considered as agriculture and should be removed from the acreages and nutrient loads assigned to agriculture within a BMAP. Any incidental parcels that meet the criteria below but do contain agricultural activity are still subject to the requirements of law and FDACS will pursue enrollment.

DOR Use Code 70-98: Parcels that have a use code of 70-98 are associated with industrial or institutional use such as schools, mines, military lands, churches/cemeteries, rights of way, utilities, government entities, and similar uses. These parcels are not expected to be used for agriculture.

DOR Use Code 99: Parcels that have a use code of 99 have a land use description of "acreage not zoned agricultural – with or without extra features." These parcels are often vacant and have been found (through responses to the FDEP's mailout efforts) to not be utilized for agriculture.

Non-Agricultural Entities: Parcels owned by industrial or institutional entities do not always have DOR Use Codes 70-98. FDACS can identify parcels owned by industrial or institutional entities that don't have a 70-98 use code based on the parcel owner's name. For these industrial or institutional entities parcels that do not have a 70-98 use code and do not have an agricultural tax valuation, FDACS categorizes the parcel as being owned by a non-agricultural entity. Through this process FDACS often identifies parcels owned by utilities, churches, WMDs, cities, counties, and private entities such as Anheuser Busch, Disney, as well as entities engaged in outdoor recreation, mining, and sewage disposal that are not expected to be used for agriculture.

Parcels without agricultural tax valuation and with a non-agricultural land use: The "Just Value of Land Classified Agricultural" indicates if a parcel is classified agricultural by the county property appraiser pursuant to s. 193.461, F.S. FDACS recognizes the criteria for a parcel to receive this valuation varies from county to county and that these valuations, like other property information, change rapidly. If the data shows a parcel has neither an agricultural tax valuation nor an agricultural land use, the parcel is not expected to be used for agriculture.

Parcels without agricultural tax valuation and with an agricultural land use: Sometimes there are parcels that the county property appraiser has not granted an agricultural valuation despite having assigned the parcel an agricultural land use. Analysis shows that there are not many of these cases and they consist of smaller acreage. Considering the nature and infrequent occurrence of this combination of parameters, these parcels are not expected to be used for agriculture.

SOLARIS: Parcels in the Florida State Owned Lands and Records Information System (FL-SOLARIS), developed and maintained by FDEP, are "owned, leased, rented, or otherwise occupied" by a state government entity and are not expected to be used for agriculture. FDACS actively seeks leasing information from FDEP, the WMDs, Florida Division of Management Services, and other government entities and is working with the State Lands division to include standard language for BMAP requirements in all lease documents.

Water Management District Projects: Parcels within a state or WMD restoration or water storage project boundary, on which the purpose is to restore, protect, and preserve the water resources, or to capture and redirect water to areas where it is needed most, are not expected to be used for agriculture.

Not Enrollable

Unenrolled agricultural lands located within parcels that meet the criteria listed below are likely agricultural in nature but are not enrollable in a current BMP manual for one reason or another. Many of the acreage types in this bin are not expected to be enrolled under current circumstances and should not count against the percent enrollment numbers. These unenrolled agricultural lands will be checked at the time of each BMAP evaluation, and possibly more frequently, to determine whether they should be placed in another bin or can be enrolled.

No Overlap: Unenrolled agricultural areas that do not overlap with the property appraiser parcel data. This lack of overlap is due to the space between parcels, delineation, and sometimes missing parcels. Given that enrollment is based on DOR owner information, OAWP cannot pursue enrollment if there is no parcel information available.

Slivers: A parcel that has only a small percentage of its total area identified as agricultural land is known as a "sliver." Slivers are produced when datasets such as land use and parcel boundaries are overlaid and due to small differences in geometry, the resulting spatial boundaries do not align precisely. Slivers are not enrollable because they are an artifact of the geospatial analysis and do not represent lands with active agricultural practices. These acreages are not expected to be enrolled and should not count against the percent enrollment numbers.

Tribal Lands: Sovereign lands under tribal ownership with agricultural activities are not subject to the requirements of Section 403.067, F.S., or other state requirements. Agricultural lands under tribal ownership are not required to enroll or monitor water quality, and the acreages and nutrient loading are recognized to be beyond the authority of current programs within a BMAP. These acreages are not expected to be enrolled and should not count against the percent enrollment numbers.

Parcels with an agricultural tax valuation and with a non-agricultural land use: Unenrolled agricultural lands within a parcel that the county property appraiser has granted an agricultural tax valuation despite having assigned the parcel a non-agricultural land use. Parcels that fall within the "Timber/Aquaculture" or "Not Agriculture" bin are removed from unenrolled agricultural lands prior to evaluation for this category. The typical non-agricultural land use categories that have an agricultural tax valuation are residential categories such as single family, mobile homes, miscellaneous residential, multi-family, or vacant residential. FDACS does not expect these parcels to be used for agriculture. These acreages are not expected to be enrolled and should not count against the percent enrollment numbers.

Future policy discussions will determine how these properties should be considered and the agency/governing entity that can best assist these properties to meet BMAP requirements. Furthermore, based on policy discussions, these properties may be removed from FDACS statewide agricultural land use coverages.

Fallow Agricultural Lands: Unenrolled agricultural lands within parcels that have an agricultural tax valuation and the DOR data indicate an agricultural land use. These parcels have not been previously enrolled, do not have any active agriculture compatible with the current OAWP BMP Program, and cannot be enrolled in the current BMP Program.

FDACS will maintain a list/shapefile of parcels categorized as fallow agricultural lands that can be provided to FDEP as needed. Future policy discussions will determine any parameters necessary to maintaining and verifying this designation as well as whether loading and acreages should be handled as a separate agriculture category that has enrollment limitations.

Rural Residential: Unenrolled agricultural lands within parcels that have an agricultural tax valuation and the DOR data indicate an agricultural land use. The parcel(s) contains or is contiguous with a residence and may have livestock, crops, etc. for personal use of the resident (includes equine communities). There are thousands of rural residential lands of various sizes throughout Florida.

FDACS will maintain a list/shapefile of parcels categorized as rural residential that can be provided to FDEP as needed. Future policy discussions will determine how these properties should be considered and the agency/governing entity that can best assist these properties to meet BMAP requirements. Furthermore, based on continuing policy discussions, these properties may be removed from FDACS statewide agricultural land use coverages.

No Applicable Manual: Unenrolled agricultural lands within parcels that have an agricultural tax valuation, and the DOR data indicate an agricultural land use. These parcels do not have any active agriculture compatible with the current OAWP BMP Program and cannot be enrolled in the current BMP Program. These parcels may be compatible with the previously considered "Diversified Operations."

FDACS will maintain a list/shapefile of parcels categorized as "No Applicable Manual" that can be provided to FDEP as needed.

Agriculture

Parcels with agricultural tax valuation and have an agricultural land use: The "Just Value of Land Classified Agricultural" indicates if a parcel is classified agricultural by the county property appraiser pursuant to s. 193.461, F.S. FDACS recognizes the criteria for a parcel to receive this valuation varies from county to county and that these valuations, like other property information, change rapidly. However, if DOR data indicate that the county property appraiser has granted a parcel this valuation and assigned the parcel an agricultural land use, FDACS considers the parcel agriculture.

Remaining Agricultural lands: Unenrolled agricultural lands that did not meet any of the criteria identified in the Timberland (Forestry) /Aquaculture, Not Agriculture, or Not Enrollable.

Table 7. FDACS Categories and DEP Bins

Category	Ag Yes or No	BMAP Action	DEP Bin
Aquaculture	Yes	Handle loads separately. Include Aquaculture narrative in BMAP.	Timberland/ Aquaculture
Timberland (Forestry)	Yes	Handle loads separately. Include Timberland/ Forestry narrative in BMAP.	
DOR Use Code 70-98	No	Reassign acreages and nutrient loads.	Not Agriculture
DOR Use Code 99	No	Reassign acreages and nutrient loads.	
Non-Agricultural Entities	No	Reassign acreages and nutrient loads.	
Agricultural tax valuation = No AND Parcel Land Use = Not Agriculture	No	Reassign acreages and nutrient loads.	
Agricultural tax valuation = No AND Parcel Land Use = Agriculture	No	Reassign acreages and nutrient loads.	
Within SOLARIS	No	Reassign acreages and nutrient loads.	
Within WMD Project	No	Reassign acreages and nutrient loads.	
No Overlap	Yes	Agriculture load. Include narrative in BMAP regarding enrollment limitations.	Not Enrollable
Sliver	Yes	Agriculture load. Include narrative in BMAP regarding enrollment limitations.	
Tribal Lands	Yes	Agriculture acreages and loads but handle separately. Include Tribal Lands narrative in BMAP.	
Fallow Agricultural Lands/Rural Residential	TBD	Initially included as agriculture load. Include narrative in BMAP regarding enrollment limitations. Once identified after contact with landowner or other means, FDACS will provide list to DEP for consideration of excluding loads and acreages at the time of next BMAP update.	
No Applicable Manuals	Yes	Initially included as agriculture load. Include narrative in BMAP regarding enrollment limitations. Once identified after contact with landowner or other means, FDACS will maintain a list/shapefile of parcels that can be provided to DEP as needed.	
Agricultural tax valuation = Yes and Parcel Land Use = Not Agriculture	TBD	Initially included as agriculture load. Include narrative in BMAP regarding enrollment limitations. FDACS will provide list to DEP for consideration of exclusion loads and acreages at the time of next BMAP update.	
Remaining Agricultural Lands (Ag tax valuation = Yes AND Parcel Land Use = Ag)	Yes	Agriculture load.	Agriculture

Appendix IV: Research

FDACS funds research to support and provide the scientific and technical basis for the OAWP BMP Program, and to investigate new, innovative practices that improve and quantify nutrient and irrigation use efficiencies. Studies must address at least one OAWP research priority:

- ▸ Nutrient management systems
  - Agronomic rate recommendations that balance production with water resource protection through the inclusion of water quality monitoring
  - Soil and tissue test calibrations and correlations
  - Controlled Release Fertilizer use efficiency related to seasonality, rainfall, and heat units in Florida for various commodities
  - Fertigation to improve nutrient use efficiency
  - Software and data collection tool development

- ▸ Irrigation application and management technologies

- ▸ Water resource protection using nutrient mitigation methods and treatment technologies for on-farm or edge-of-farm application

- ▸ Soil Health specific to Florida
  - Mixed species or cover crops for improving nutrient utilization
  - Rotational cropping or integrated crop/livestock systems for improving nutrient utilization

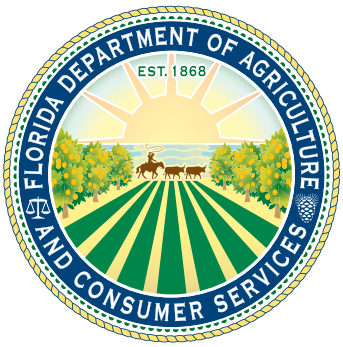
- ▸Demonstrations of water quality improvement projects that provide information on FDACS BMP benefits to water resources with specific reductions in nutrients (lbs/ac) and quantities of water savings.

OAWP's research priorities and proposals are reviewed annually by a working group comprised of agricultural industry representatives, federal and state agencies, educational institutions, and other stakeholder partners.

As of July 1, 2020, OAWP must prepare research plans and legislative budget requests (LBR) to support research projects each year. [15] The office has developed a process for submitting and reviewing proposals with the support of the Research Coordinating Work Group and OAWP staff.

Research conducted in support of the BMP Program has demonstrated reduced nitrogen fertilizer use on crops when using precision agriculture technologies such as fertilizer banding equipment, drip irrigation, and variable rate irrigation. Other innovative nutrient management techniques, such as soil moisture sensors, demonstrate improved irrigation efficiency and reduced nutrient loss to the environment. Research is ongoing with regard to the use of cover crops to build soil health, reduce fertilizer needs, and support animal health. Research has demonstrated that producers can reduce fertilizer application rates by applying the right nutrients at the right time based on plant growth stage. [16]

15. Section 43.067(4)(f), F.S.; Section 373.813(2), F.S.
16. Section 373.4595(2)(a), F.S.



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